

SAUDI ARAMCO  
**world**

January/February 2012  
[saudiaramcoworld.com](http://saudiaramcoworld.com)



*Seeds of High Asia*





Seeds from these wild relatives of two types of clover, barley and wheat, collected in Tajikistan, are more resilient than their commonly cultivated counterparts, making them useful in building scientific defenses against global food crises. Photograph by Matthieu Paley.

**Publisher**

Aramco Services Company  
9009 West Loop South  
Houston, Texas 77096, USA

**President**

Ahmed M. Alzayyat

**Director**

**Public Affairs**  
Mae S. Mozaini

**ISSN**

1530-5821

**Editor**

Robert Arndt

**Managing Editor**

Dick Doughty

**Assistant Editor**

Arthur P. Clark

**Administration**

Karim Khalil  
Sarah Miller

**Circulation**

Edna Catchings

**Design and Production**

Herring Design

**Printed in the USA**

RR Donnelley/Vetmore

**Address editorial correspondence to:**

The Editor  
Saudi Aramco World  
Post Office Box 2106  
Houston, Texas  
77252-2106 USA

**Back Cover**



At the heart of Wadi Hanifah's restoration are "bioremediation cells," photographed here from above, which combine more techniques of wetland biology than any other major water-treatment facility. For plants and wildlife, this means new habitat; for people, it means new recreational space and renewed civic pride. Photograph courtesy of Arriyadh Development Authority.

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.



## 2 Seeds of High Asia

Written by Louis Werner

Photographed by Matthieu Paley

Grown in Tajikistan in the shadow of the Pamir Mountains from seeds hand-selected for hardiness, the Ismatuloyev family's rye field drew a multinational seed-collecting team interested in its genetic makeup. The team's goal: Keeping food on the world's table, for this century and beyond.



## 10

## A Wadi Runs Through It

Written by Matthew Teller

Photographs courtesy of Arriyadh Development Authority

One of the world's most advanced systems of natural water treatment has helped transform Riyadh's historic seasonal waterway, Wadi Hanifah, into a corridor oasis that won an Aga Khan Award for Architecture. (And yes, you can go fishing there now.)



## An "Extremely Civile" Diplomacy

Written by Caroline Stone

From the late 1500's into the 1700's, Morocco and England shared both trade and political interests, which led to regular exchanges of ambassadors. Among the Moroccans who came to London, several became celebrities, and English writers' detailed, often glowing descriptions of these "most accomplish'd gentlem[e]n" illuminate both the diplomats and their turbulent times.



16: MUHAMMAD OHADU, THE MOROCCAN AMBASSADOR, 1684. BY SIR GODFREY KNELLER AND JAN WYCK. CHISWICK HOUSE / ENGLISH HERITAGE PHOTO LIBRARY / BRIDGEMAN ART LIBRARY (DETAIL)



# 24

## Ramadan in the Farthest North

Written by Alia Yunis  
Photographed by Tor Eigeland

The world's northernmost mosque lies more than a few clicks above the Arctic Circle, in the Norwegian city of Tromsø, where this year the mosque's members celebrated the holy month with a blending of cultures, from the local one to those from afar.



# 32

## The Enduring Craft of Yemeni Silver

Written and photographed by Marjorie Ransom

Time was when Yemeni silversmithing was something of an endangered species among world jewelry arts. Bolstered by new demand and rekindled national pride, a few dozen young silversmiths are now chasing, filigreeing and granulating new life into one of the Middle East's finest jewelry traditions.



# 38

## The Lady's Cairo

Written by Edward Fox  
Photographed by Dana Smillie

Mention "The Lady" (*al-Sitt*) in Cairo and you are talking, as everyone knows, about Umm Kulthum. Though she died in 1975 and the Opera House where she once performed is now a parking garage, her voice—at once starkly plaintive and darkly mysterious—is still on the playlists of almost every street, and every heart.



## 44 Classroom Guide

Written by Julie Weiss

## 46 Events & Exhibitions



# Seeds of



Among the hundreds of food and forage plants in Tajikistan, this grass pea, *Lathyrus sativus*, a relative of the sweet pea, is a candidate for breeding and seed storage. Agricultural geneticists regard such species as “insurance crops”—seeds that can step in if a conventional crop species experiences widespread distress.



# High Asia

A close-up photograph of a hand holding a green pea pod. The hand is positioned on the right side of the frame, with the thumb and index finger gripping the pod. The pea pod is open, revealing several bright green, round peas inside. The background is a soft-focus field of tall grass or reeds, with a hint of a blue sky or distant hills. The overall tone is natural and serene.

Written by Louis Werner  
Photographed by Matthieu Paley



hat connects seed banks in Syria, Russia and New Zealand to Khuvaydo Ismatuloyev, a 29-year-old farmer ready to harvest his rye crop in eastern Tajikistan, is not a simple story, yet it is one of

vital importance. The genetic makeup of Ismatuloyev's plants, cultivated in a short growing season and under highly stressful conditions at more than 2000 meters (6500') altitude in the shadow of the Pamir Mountains, may represent science's best hope to overcome some future global food crisis caused by, say, a killer plant fungus or voracious pests or a sudden shortage of essential chemical fertilizers.

Ismatuloyev's rye crop is a "landrace," a primitive, highly local variety of this cereal grass. His forefathers hand-selected seeds from individual rye plants for replanting, repeating the process over many generations, because of the superior characteristics of those individual plants. The seeds thus selected have a genetic makeup that allows them to survive drought, frost, poor soil and bugs that are resistant to chemical pesticides. Breeders can cross plants grown from these seeds with modern varieties of rye, or scientists might splice their genes into other rye seeds—or even perhaps into different plants altogether—in order to add such

characteristics as frost hardiness, drought resistance or salt tolerance in the face of changing conditions.

That is why a team of scientists from Aleppo's International Center for Agricultural Research in the Dry Areas (ICARDA), St. Petersburg's Nikolai Vavilov Research Institute of Plant Industry (VIR) and New Zealand's Margot Forde Forage Germplasm Centre has come to collect seeds on a three-week mission that will take them to farmers' fields and uncultivated roadsides all over the province, from the lower valleys of the Panj River, a tributary of the 2540-kilometer (1500-mi) Amu Darya, up toward the Bam-i-Dunya, the "roof of the world," in the High Pamirs, at mountain passes over 4000 meters (13,000') high.

Also on the mission are Saidzhafar Abdulloyev, a specialist in the *Allium*—onion and garlic—genus, and Mirullo Amonulloyev, who is interested in Pamiri varieties of wheat and barley. Both men are from the Plant Genetics Resources Center of the Tajik Academy of Agricultural Sciences. Marco Polo, who traveled through



In Dushanbe, capital of Tajikistan, a wall hanging in the Rohat ("Relax") Restaurant, left, and a walk through the Zelyoni vegetable market, lower, both hint at the bounty that makes this land-locked, mountainous country a center of world food-plant diversity: Apricots alone, for example, come in up to 300 varieties.





this region some 750 years ago, called the Pamirs after their Chinese name, the “Onion Mountains”—most likely because of the ten wild varieties of onion that grow here. Abdulloyev is keen to find them. According to Pamir scholar Robert Middleton, Marco

diversity, according to followers of pioneering Russian botanist Nikolai Vavilov, who died in a Stalinist prison in 1943. Vavilov’s first seed-collecting mission in the summer of 1916 was to this region, and he was struck by its extreme isolation—Badakhshan

province makes up half of Tajikistan’s area but contains just three percent of its population—contrasted with its great diversity of food-plant varieties. He theorized that it must have been a “center of origin” of agriculture, the source of cultivated seeds that had then diffused outward to other areas. Since Vavilov, scientists have been fascinated by this region as well as his other high-altitude hotspots of biodiversity: the Ethiopian highlands, the Andes, and the Caucasus. ICARDA is making its sixth visit to Tajikistan, and Sergey Shuvalov, the Russian delegate from VIR, has come five times since 2003.

The team’s first collection site is at the roadside near Kishlak village, en route to the Pamirs, where they find mixed varieties of wheat in a single field. They collect the seeds in sealed envelopes, recording such key data as the size of the area collected from, its degree and direction of slope, the soil texture, salinity, acidity and parent rock, and its drainage. GPS instruments record altitude,



**En route to farmers’ fields and roadside weed patches alike, the team of scientists from institutes in Syria, Russia and New Zealand sets out for two weeks in pursuit of seeds from as many food and forage plants as they can find. Right: The team includes botanists, plant geneticists and specialists in onions, garlic, wheat and barley, as well as a historian and a farmer. Below: Before setting out, the team received advice on its route into the Pamirs (see map, next page) at the Tajik Academy of Agricultural Sciences in Dushanbe.**

Polo may have followed the same route as this team plans to, up the Ghunt River valley, which enters the Panj at the provincial capital of Khorog.

An American historian of science and an Australian farmer complete the mission team. Together, they are looking for all cultivated varieties of food and forage plants—everything from red- and white-eared wheat (called *surkhak* and *safedak* in local languages) to beans and peas and clover and chicory. As well, they are searching for those plants’ wild relatives, such as species of the *Aegilops* genus, called goatgrasses, which are precursors of common wheat, and medusaheads, or *Taeniatherum caput-medusae*. Those plants are considered noxious field weeds in developed countries, but they have been found at Iranian archeological sites.



Presumably, therefore, they were of some value to humankind once; perhaps they could be again.

The Pamir Mountains are considered one of the world’s centers of food-plant

latitude and longitude. The scientists aim to collect seeds from at least 100 plants per species per site in order to capture the genetic diversity of the plant population there and to maximize the likelihood of getting viable seeds that will germinate.

If the quantity of seeds collected is not adequate for testing, they will first be “multiplied” in seed-bank greenhouses or grown out in consecutive harvests to generate more seeds. They will then undergo characterization studies to determine such characteristics as how many days the plants take from germination to flowering, the number of seed heads per plant and seeds per head, and the amount of protein they contain.

In time, the collected seeds may undergo tests with varying light, temperature,





moisture and soil quality to determine their environmental tolerances. All this information is then entered in specialized websites and the seeds are shared with other seed banks and research centers as requested, and often co-stored in the newly opened Svalbard Global Seed Vault in northern Norway, the so-called Doomsday Vault, buried deep in permafrost so that even a worldwide electrical failure would not degrade its collection.

New Zealander Zane Webber is especially eager to find seeds of forage plants that are infected with beneficial fungal endophytes that help them resist environmental stresses. He will not know if he is lucky until he can put them under a microscope and test them in a greenhouse back home, but if so, the fungus could be introduced to commercial seed lines. Webber's understated eureka moment comes early in the trip, just before the group passes over the 3252-meter (10,650') Khob-u Rubot Pass, the gateway to the Pamirs, when he finds red clover growing at 2800 meters (9200')—near its maximum, and an altitude at which such endophytes might well thrive.

Seventeen-year-old Behruz Muzafarov, of nearby Razak village, some 25 kilometers (14 mi) from the nearest market, has five brothers, two currently working in Moscow to supplement the income from the family farm, with its meager crops of potatoes, wheat, barley and flax. Even though the potatoes he grows are a food plant of New World origin, introduced here by the Russian army in 1910, the Muzafarov family's careful selection of seed potatoes from each year's crop is slowly adapting the plants to this Old World environment. Though the region seems as mountainous as the Andes, its different soil, rainfall, pest and disease characteristics make it a decidedly different environment from the agricultural point of view.

Behruz also grows a forage crop called sainfoin—the French name means “healthy hay,” but the plant is in fact a legume—that

is highly nutritious, easily digestible and early-maturing. Shuvalov notes, however, that Behruz's long-awned wheat variety is probably not a landrace, but more likely grown from commercial seed.

ICARDA taxonomist Jose Piggin's jeweler's loupe comes in handy for identifying species of *Medicago* (medicks or burclovers) and *Vicia* (vetches, wild relatives of the broad bean), as she counts

**On a 2000-kilometer (1250-mi) itinerary that included some 45 stops—some planned, some spontaneous—team members Jan Konopka, Mirullo Amonulloyev and Sergey Shuvalov keep a lookout for promising fields.**



tendrils, ligules and leaves, or checks whether the seed cases of wheats and ryes are pubescent (hairy) or glabrous (smooth). When she needs a reference, she turns to the relevant pages of the 11-volume *Flora of Turkey*, published by Edinburgh University, which

captures most of the plant life across Central Asia. But much of what she knows, she knows on sight. Of special interest to her is grass pea, *Lathyrus sativus*, related to sweet pea. ICARDA has a program to grow improved varieties of this plant, which is an insurance crop in many countries because of its hardness.

Seed collectors themselves are a bit like foraging animals, wandering far and wide in search of the same plants, and Shuvalov, the expedition's chief logistics planner, translator and route finder, often has to whistle them back to the vehicles. He is aware of the honor of following Vavilov's footsteps, but doubts that he will have time this trip to collect anything near the 200 species and varieties that his compatriot did here 100 years ago.

It is a shame that this mission is not focused on orchard crops, for the Pamirs are famous for their mulberries, apricots, apples and pears, sold





fresh at the roadside and put out for drying on flat rooftops. Khukmatullo Akhmadov, president of the Tajik Academy of Agricultural Sciences, had sent the team off with a glowing discourse about his country's 300 varieties of apricot and 180 varieties of grape, saying that the scientists were in luck to be here during harvest season. "One day everything may disappear," he told them. "So everything you collect is valuable, whether it is unique to Tajikistan or not. One day the only surviving variety of an important food plant may be found in the seed bank."

Farmers in Nishusp village in the Shugnan district cultivate rye



**This was the fifth seed-collecting expedition to Tajikistan since 2003 for Sergey Shuvalov of the Nikolai Vavilov Research Institute of Plant Industry in St. Petersburg, named after the botanist whose accomplishments included a 1916 expedition that collected more than 200 seed varieties in Tajikistan.**

Farther up the Panj River Valley, and still just across the river from Afghanistan, is the Kuh-i Lal spinel mine, whose gems were known as "balas rubies" (a corruption of the name Badakhshan) in medieval Europe, and praised in the verse of Chaucer and Dante. In a nearby village, farmer Khuvaydo is irrigating his rye crop one last time before harvest. He faces a long winter, often getting three

meters (10') of snow, and can expect his first frost in October. A woman bundles a few ripe ears of rye into a palm-size bouquet and takes it into the house as a good-luck charm for next year's harvest.

Not far along, just as the Wakhan valley widens out at the town of Ishkashim, Nowshak Peak looms briefly in the distance. At 7492 meters (24,580'), it is Afghanistan's highest summit. Thus Khuvaydo, like his crops, is well accustomed to the early and severe cold that comes here. "In winter," he says with a smile, "we just clear away the snow from our fields and play football."



**Using envelopes to keep species separate, Shuvalov and Amonulloyev, above, aim to gather at least 100 seeds from each species. Right: At one of the team's campsites, science historian Courtney Fullilove records data such as soil type, salinity, acidity, nearby rocks, and the degree and direction of slope for seed samples.**

and beans in the same field, as is usual in the Pamirs, where arable land is scarce. They are then harvested, threshed and milled together, and the combination used to make soups, stews, noodles and a black bread called *mahin mahourj*, or "made from beans." Short-stemmed wheat and long-stemmed rye are also sometimes grown together in the same field. Though they have different maturing times, the stalk connecting each seed to the ear of the early-ripening crop is so strong that it can stand in the field without loss until the other crop is ready.





The Pamir Biological Institute in Khorog includes one of the world's highest botanical gardens at 2320 meters' elevation (7600'). Among the most striking trees in the garden, which includes some 2300 total species and varieties of flora from all over the world, are an impressively weeping *Morus alba*, or white mulberry, as well as many species of poplars, especially the *Populus nigra*, that tall, stately, vertically branched tree which dominates the Pamiri landscape. The personal favorites of Ogonazar Aknazarov, director of the Institute, are *Betula pamirica*, a birch, and *Juniperus shugnanica*, a juniper—both local varieties, to judge by their

**ICARDA botanist Jose Piggin uses her jeweler's loupe to count tendrils and leaves and discern whether the seed cases of wheats and ryes are pubescent (hairy) or glabrous (smooth).**



## What Is a Seed Bank?

Seed banks, now often called gene banks, are climate-controlled facilities for storing the seeds of plants deemed to be of scientific or economic interest. These seeds can then be shared or exchanged with international researchers and breeders. Most countries of the world store the seeds of value to their own agriculture in their own national seed banks. International agricultural research stations, such as ICARDA, the International Rice Research Institute in the Philippines or the International Potato Center in Peru, also store seeds and their genetic components. Large centers with worldwide collections include the Svalbard Global Seed Vault in Norway, the Millennium Seed Bank in Britain and the National Center for Genetic Resources Preservation in Colorado, in the United States. Universities, commercial agriculture companies and smaller non-profit organizations also maintain seed banks, bringing the world's total to more than 1300.

species names—and of course the beloved *Armeniaca vulgaris*, or wild apricot.

Professor Aknazarov is the consummate academician, educated in the rigorous Soviet system at the Komarov Botanical Institute in St. Petersburg. His desk is piled high with books and dried specimens, and he can cite the Linnaean taxonomy of his rarest accessions with ease. Yet he is also a soft-hearted nostalgist for the food pleasures of his past. “My first memory of the family garden,” he says, “is stuffing myself with ripe mulberries. My friends and I would climb the trees and eat until our faces and fingers were black with juice. We called each other monkeys, although we had never seen a monkey in our lives. Wheat bread may be the Pamiris’ first food, but *tut-pikht*—mulberry bread—is our second.”

When asked about a line from the *Travels* of Marco Polo about the Pamirs—“Good wheat is grown, and also barley without husks. They have no olive oil, but make oil from sesame, and also from walnuts”—he concurs, remembering how, as a child, he stole walnuts from his neighbor’s trees, and couldn’t deny it when he was questioned because his fingers were stained and sticky with walnut juice. But he notes that Marco Polo forgot to mention apricot oil, made from the fruit’s kernel, which is a cure for high blood pressure if taken with warm milk. And the “barley without husks”? It is called naked barley, *Hordeum vulgare* var. *nudum*, he agrees, and is common in the Pamirs.

Aknazarov accompanied American ethnobotanist Gary Paul Nabhan on the tour of the Pamirs in Vavilov’s footsteps that Nabhan recounted in his book *Where Our Food Comes From*. The

Pamirs, like the Caucasus, are a veritable “mountain of tongues,” as the Arabs called the latter: Each valley has its own language, all of them from the Eastern Iranian family, such as Wakhi, Shugni and Ishkashimi.

The professor speaks them all, which caught Nabhan’s attention. “The mere act of naming a newly found variety,” he wrote, “leads to isolation and further selection.

**A young farmer near Ishkashim enjoys a break while team members (in the background) collect sample seeds from his wheat field. When Marco Polo passed this way, he, too, seems to have noticed its crop diversity when he wrote that “good wheat is grown, and also barley without husks.”**





Vavilov surmised that at a larger scale—that is, in the Panj River watershed—linguistic diversity could well have fostered crop diversity.” Thus when, say, one particular apple tree turns out an especially healthy and sweet fruit, and is then selected for further planting and given a name in that valley’s dialect, then that apple suddenly becomes a new variety of *Malus domestica*, and will perhaps gain fame throughout the valley and spread out from there up and down the Pamirs.

Plain old cereals and legumes are less likely to gain such fame, or to travel far afield because of it, and that is why it is so important for collectors of their seeds to go to those valleys in person. The team from ICARDA, VIR and New Zealand’s Forage Centre will return to Tajikistan’s capital of Dushanbe to clean, sort and divide seeds. One duplicate set will be left at the National Academy’s own seed bank; others will be sent through quarantine to Aleppo, Palmerston North and St. Petersburg, and eventually to seed banks around the world. And perhaps that pest-resistant fungal endophyte found in a grass seed at 2800 meters, or that salt-tolerant gene found in a wheat variety up the Ghunt River valley, may one day be of use to science.

But in the meantime, amateur plant collector Parpisho Kimatshoev is not waiting for foreign scientists to work their slow process of seed collecting and analysis. Oblivious to the interest that the outside world takes in Pamiri biodiversity, he goes about his weekly routine, heading to the mountains outside his hometown of Khorog. Does his neighbor have an upset stomach today? For that he will collect *zirdos*, a yellow yarrow flower whose petals he will dry, pulverize and mix with sugar and water. Are

Kimatshoev’s 60-year-old bones aching? For that, he might make a poultice of *hichifgorth*, which he has seen lame ibex eating. Does his daughter need to clean her system? For that he will gather *nakhchirwokh* root, to boil, cool in a dark place for two days and give her to drink.

Kimatshoev calls his medicinal plants by their Shugni names,

**Raised by hand in valleys isolated enough to develop unique strains, the multiple varieties of wheat in this young woman’s family field near Elok may contain genetic keys to a more dependable, abundant world food supply.**




which are not found in any dictionary. He says they grow in places only he knows, and he is not sure he should show foreigners where to find them. He has nothing against western medicine or modern agronomic science, he says—it is just that he would rather cure his ills according to old Pamiri ways, by eating what grows wild in his own mountains. 🌐



**Louis Werner** is a freelance writer and filmmaker living in New York.



Istanbul-based photojournalist **Matthieu Paley** ([www.paleyphoto.com](http://www.paleyphoto.com)) specializes in documenting the cultures and lands of the Pamir, Karakoram and Hindukush mountain ranges.

 **Five Continents.** Nikolai Ivanovich Vavilov. Doris Löve, tr. 1997, Nikolai Vavilov Research Institute of Plant Industry, 978-92-9043-302-6, pb.

**Where Our Food Comes From.** Gary Paul Nabhan. 2011, Island Press, 978-1-61091-003-3, \$24 pb.



**Related articles** from past issues can be found on our Web site, [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). Click on “indexes,” then on the cover of the issues indicated below.

Tajikistan: M/J 97, N/D 98  
ICARDA: S/O 83, M/J 88

Gary Nabhan: M/J 94, M/A 07



[www.vir.nw.ru](http://www.vir.nw.ru)  
[www.icarda.org](http://www.icarda.org)  
[www.pamirs.org](http://www.pamirs.org)

[www.seedhunter.com](http://www.seedhunter.com)  
[www.vaviblog.com/category/journeys/pamirs/](http://www.vaviblog.com/category/journeys/pamirs/)



Scan this QR code with your smartphone, or go to [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com), to see a video of seed-hunters discussing their fieldwork.



## Down by the lake, Hussein Al-Doseri is beaming.

“Before all this, there were no services here—no trails, no routes. Now it’s easy.”

An athletic 30-something in a white T-shirt and wraparound sunglasses, Al-Doseri stretches his arms wide toward the landscape of trees and open water that forms Wadi Hanifah, shimmering amid a dusty industrial suburb in south Riyadh.

Treated for years as a dump and a sewer, the wadi has been the focus of a 10-year-long restoration project. In November 2010, it became one of the few environmental engineering projects to win an Aga Khan Award for Architecture, and it has won over plenty of fans in the Saudi capital.

“I come here all the time, day and night,” grins Al-Doseri. “It makes me happy, to relax and spend time with my family by the water. It feels like the opposite of Riyadh. Nowadays, if I want to meet friends, I tell them: ‘To the lake!’”

**Lush with date palms and cultivated farmland, Wadi Hanifah is where the Saudi capital developed.**



# A Wadi Runs Through It

Written by Matthew Teller

Photographs courtesy of Arriyadh  
Development Authority



Rising in the highlands of al-Hissiyah, on the Najd plateau of central Saudi Arabia, Wadi Hanifah runs southeast for around 120 kilometers (75 mi) before losing itself on the fringes of the Rub' al-Khali, or Empty Quarter. Fed by more than 40 tributaries, this great watercourse has a catchment area covering much of the eastern Najd, more than 4500 square kilometers (1740 sq mi), across what was historically known as al-Yamamah.

The meandering valley (*wadi* in Arabic) is dry for nearly all of the year, but remains fertile thanks to aquifers close to the surface. It

has attracted human settlement for millennia. Centuries before Islam, the tribe known as Banu Hanifah (*hanifah* means “pure” or “upright” in Arabic) was farming and trading up and down the valley. Among the towns and cities they founded was Hajr (“stone”), which became al-Yamamah’s capital. Described firsthand by the 14th-century traveler Ibn Battuta as “a beautiful, fertile city, with abundant water,” it eventually gained the bucolic name by which it is known today: al-Riyadh (“The Gardens”).

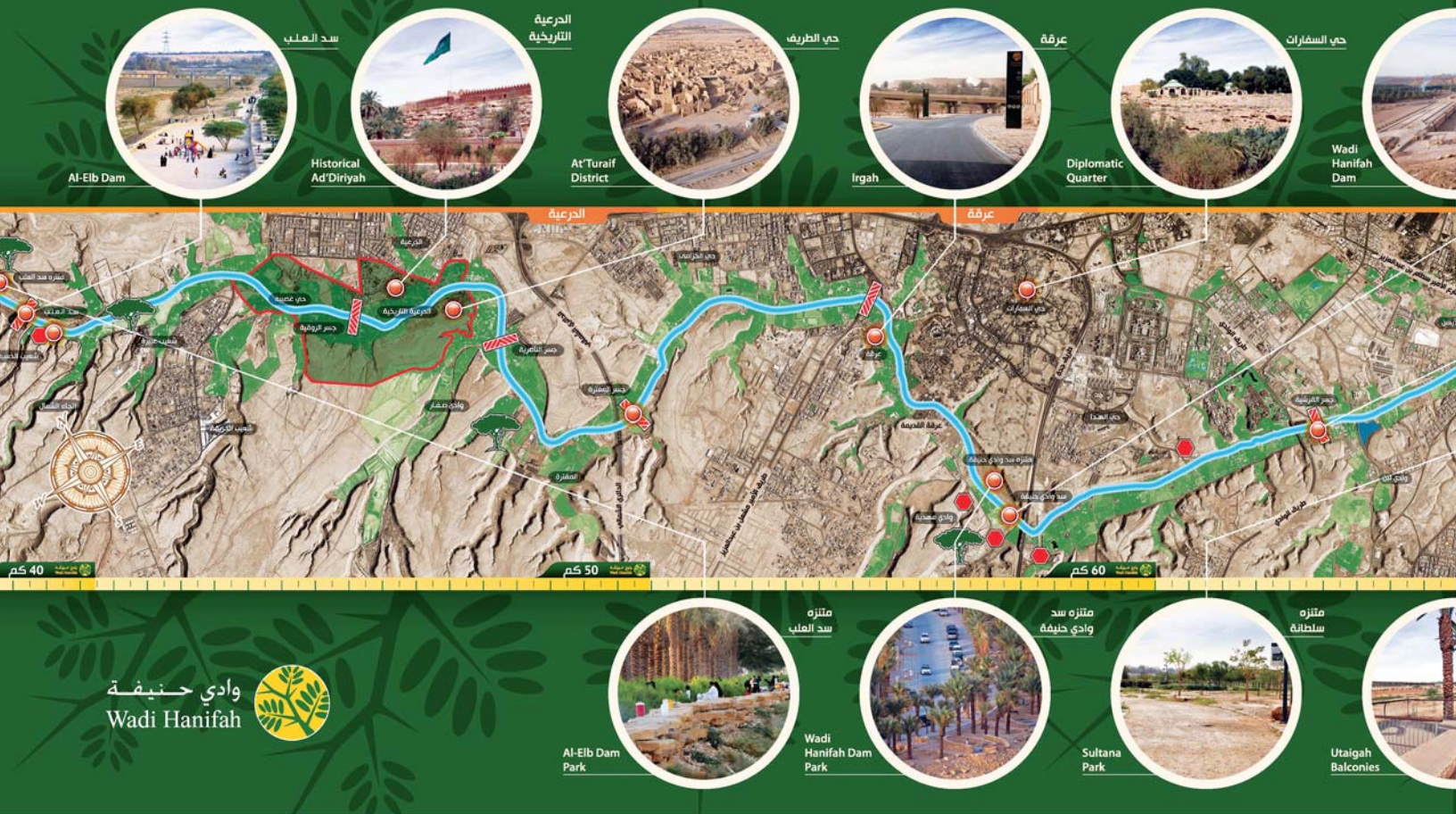
As a village, and then as a small town, Riyadh grew with its population. But from

the early 1970’s, as Abdullatif Al Asheikh, president of the Arriyadh Development Authority (ADA), has stated, “significant expansion in the city’s area [and commercial activity] affected the wadi badly.” Rapid growth overwhelmed fragile ecosystems. Quarrying for stone and extraction of soil for construction work undercut the banks of the flood channel. There was unregulated mineral mining. Date palm plantations flanking the wadi encroached on the flow channel, which was further impeded by uncontrolled dumping. As a result, the seasonal flash floods caused



Stone Dam Park is built around one of five new, year-round lakes that use naturally treated urban runoff.





unnecessary erosion and swept pollutants into residential neighborhoods. Stagnant water jeopardized public health.

By the 1980's, soaring water demand was overwhelming Riyadh's traditional dependence on self-replenishing aquifers. As the water table dropped below sustainable limits, the city turned to desalinated water, piped 400 kilometers (250 mi) from the Arabian Gulf coast.

This caused its own problems, including increased surface runoff and rising groundwater contaminated with sewage—most of which was channeled into Wadi Hanifah. Construction, between 1975 and 1984, of the city's first wastewater treatment plant at Manfuha, beside the wadi in southern Riyadh, led to upward of 400,000 cubic meters (14 million cu ft) of effluent being discharged into the wadi every day. Downstream, this smelly, unsanitary water pooled into fetid lakes.

As local farmer Ibrahim al-Salim told the ADA: "There came a point when it was impossible for us to stay any longer. We left the valley."

But the problems were not going unheeded. Saleh Al-Fayzi, long-standing director of the ADA's Wadi Hanifah Restoration Project, spoke to me with quiet passion about his involvement. "I started working on Wadi Hanifah about 20 years ago," he said, when "it had a very bad reputation. It was the city's backyard dump."

In 2001 Al-Fayzi headed a wide-ranging ADA program of restoration and redevelopment. Working with the Canadian firm Moriyama & Teshima Planners and UK-based engineers Buro Happold, the ADA has cleared garbage from the wadi, graded and landscaped it, introduced flood control, replanted native flora and devised a world-leading, natural, sustainable technique to treat the capital's wastewater.

Walking in Wadi Hanifah today, one finds few signs of its ignominious recent past. At al-Elb, 35 kilometers (22 mi) north of downtown Riyadh, desert bluffs overlook a small dam, and the western bank of the wadi here hosts a line of carefully designed family "picnic pods," backed by tall bankside palms. Each pod is a horseshoe of pale, roughly finished upright limestone slabs, offering both open

## WADI HANIFAH RESTORATION

- **Length:** 120 kilometers (75 mi)
- **Quantity of trash and rubble removed:** 500,000 cubic meters (18 million cu ft)
- **Area of cleaned wadi bed:** 10 million square meters (2500 acres)
- **Material used to repair flow channel:** 2.5 million cubic meters (88 million cu ft)
- **Parks created:** 9
- **Lakes created:** 5, total surface area 25 hectares (62 acres)
- **Shade trees planted:** 30,000
- **Shrubs planted:** 50,000
- **Roads reengineered and resurfaced:** 43 kilometers (27 mi)
- **Parking spaces:** 2000
- **Pedestrian promenades:** 7.4 kilometers (4.6 mi)
- **Recreational trails:** 47 kilometers (29 mi)
- **Directional and interpretive noticeboards:** 730

views out across the wadi—which here holds water only in winter—and privacy from passers-by. More slabs, laid horizontally, create steps and graded slopes down to the wadi bed, where children scamper along trails and families relax in the shade of acacias. There is street lighting along the pedestrian promenade beneath the palms, ample parking and public restrooms.

With a breath of wind at my back and birdsong overhead, I talked to Saud Al-Ajmi, a civil engineer at the ADA. "We have no open space in Riyadh," Al-Ajmi explained as we sat gazing out over the broad wadi bed to the bare tablelands atop the ridge. "No gardens, no beach. Wadi Hanifah

has become a place to breathe."

In other big cities, you might head up to high ground for fresh air and this sense of perspective. In Riyadh, counter-intuitively, you head down: From al-Elb, for a





full 80 kilometers (50 mi) south through the sprawl of Riyadh, Wadi Hanifah acts like a flue, drawing breezes over the city that relieve pollution and temper the heat. Moving from city to wadi, you feel a two- or three-degree drop in temperature, as well as the calm that comes when concrete, traffic and skyscrapers yield to foliage, quiet, long views and—in places—flowing water.

I took a drive with Christopher Walter, a landscape architect at Moriyama & Teshima who works with ADA. He explained how the road through Wadi Hanifah was formerly a narrow, often dangerous, crosstown shortcut. Now reengineered, with speed bumps and a 40 kph (25 mph) speed limit, it deliberately nudges through-traffic away.

We stopped near the point where Riyadh's Northern Ring Road—a crowded, multilane highway—passes over Wadi Hanifah. Down below, birds chirped in what felt like a desert garden. The wadi was perhaps 100 meters (330') across, and rounded limestone cliffs on either side peeked above high-walled date farms. The urban clamor could have been half a day, rather than half an hour, away.

"It's an oasis," Walter smiled.

We ambled down into the broad, dry flood channel, identifying as we went the newly planted flora: tamarisk trees; the yellow flowers of needle bush (*Acacia farnesiana*, called *anber* or *futnah* in Arabic);



Above: This bilingual map shows the middle 50 kilometers (35 mi) of Wadi Hanifah, along with major features of the 10-year project. Left: Aerial views of the upper wadi, which is dry except during winter rains, and the three-pond, 134-cell bioremediation facility, which produces water safe for human contact at one-third the cost of a mechanical treatment plant.

mature *Acacia tortilis* and *Acacia gerrardii*; fluffy fountain grass (*Pennisetum setaceum*); and more. Each of the stone-bedded planting cells fills out the curves of a sinuous walking trail.

As Al-Fayzi explained to me, the wadi is a "green corridor" between the eastern and western parts of the metropolis and, as such, is easily reached from all points. It is open, without gates. Bilingual Arabic-English signs are both prominent and consistent. Other information boards show a satellite image of the wadi divided into nine named zones, each with interpretive text and a "you are here" marker, alongside icons for mosques, restrooms, walking trails

and other features. Every sign bears the project's logo, a stylized acacia branch.

As we strolled, Walter pointed out dense banks of silvery saltbush (*Atriplex halimus*) and boxthorn (*Lycium shawii* or *Lycium arabicum*) on either side.

"Shrubbery is absorbent," he said. "We deliberately overplanted, to let the wadi find its own natural balance. All these bushes will thin out in time. Overplanting also promotes seed propagation. It helps to populate the wadi with indigenous species."

I wondered why, in a valley full of date palm plantations, where the newly designed recreation areas feature avenues of palms, none had been planted in the wadi itself.



“Date palms can drink 200 liters [52 gallons] of water a day in summer,” Walter said. “But if their root balls stay submerged, they die. The ones we planted here were failing because of high groundwater levels, so we’ve replaced them with water-tolerant rosewood, *Dalbergia sissoo*.”

The wadi’s winter floods, during which Riyadh receives all of its average annual 100 millimeters (4") of rainfall, have spurred other engineering innovations in the valley’s upper reaches. Walter pointed out the trapezoidal “dry weather flow channel” running down the center of the wadi bed, formed by melon-sized chunks of local limestone: Both the shape and the material minimize erosion damage. He explained that farm roads crossing the wadi have been lowered and the downstream side of each crossing packed with limestone rocks, gently sloped to dissipate the power of floodwater and minimize erosive subsurface eddies. In a few places where landowners had encroached on the wadi, the ADA resorted to compulsory purchase to widen the flood channel in order to minimize the destructive power of water during flash floods.

As Wadi Hanifah approaches the edge of the city center, its character changes. Beside the low-income neighborhood of

al-Uraijah, a box culvert enters from the east bringing surface runoff from around the city. From this point on, the wadi holds a continuous flow—though, initially, the water is untreated and unsafe.

It’s at al-Utaiqah, slightly further downstream, that the project’s core idea, and its defining conceptual elegance, is revealed. Overlooked by one of Riyadh’s busiest highway interchanges, where King Fahd Road meets the Southern Ring Road, a new bioremediation facility takes the city’s runoff and transforms it—naturally, with neither chemical nor mechanical intervention—into water clean enough for irrigation and recreation.

Bioremediation means applying natural processes to repair environmental damage. Here, it refers to a linked series of wetland habitats comprising three large ponds, totaling 900 meters (more than half a mile) in length. Their distinctive herringbone design, which hosts 134 bioremediation



cells, is discernible on satellite mapping websites. Within each cell, algae and other aquatic and riparian plants form the basis of a food web. Aided by such design features as weirs and baffles, the system effectively filters the water, removing toxicants, harmful bacteria and other pollutants. At the end of the ponds, the water is clear and odorless. Though not drinkable, it is safe for human contact.

None of these bioremediation techniques is new, but nowhere else have they been brought together on such a large scale—or at such low cost: Bioremediation requires roughly one-third the outlay that mechanical treatments do. It’s a startling, disarmingly simple process to observe. Dirty water enters and clean water comes out, with good design the only human intervention. Chief beneficiaries are farms around the city, though plans are afoot to link a sustainable nursery to the irrigation system that will grow replacement plants and trees for the wadi. Fish caught in a 15 kilometer (9 mi) stretch downstream, to the point where effluent from the Manfuha plant enters, are safe to eat. Indeed, the restoration has spurred fishing as a leisure activity, particularly just south of the bioremediation facility at Stone Dam Park, where clean water passes over weirs and through rock channels into a broad, scenic artificial lake.

At the park one busy Friday, amid a bustle of families and young children playing under the palms, Fathi Noor Hassan, who grew up in Egypt, was sitting pensively in front of two fishing rods.

“Before, I was afraid to come here with



In 1917, St. John Philby made this photograph of Dir’iyyah from across Wadi Hanifah.

## WADI HANIFAH IN HISTORY

Wadi Hanifah’s role as a highway of ideas and conflicts was of central importance during the events leading up to the creation of Saudi Arabia.

A 1744 agreement between Muhammad ibn Sa’ud, the ruler of Dir’iyyah, a town on Wadi Hanifah, and religious scholar Muhammad ibn Abdul Wahhab, from Al Uyayna (“The Little Spring”), in the wadi’s upper reaches, established what later became known as the First Saudi State. The Saudi–Wahhabi alliance remains in effect today.

From their base at Dir’iyyah, Saudi forces conquered large parts of Arabia before military defeat in 1818. Dir’iyyah was abandoned, and settlement shifted a short way downstream to Riyadh. When ‘Abd al-‘Aziz ibn Sa’ud recaptured Riyadh in 1902, it was the first in a chain of victories that led to the establishment of the modern Saudi kingdom in 1932, with Riyadh as its capital.

Today, Dir’iyyah, where 19th-century mud-walled ruins overlook the wadi, has been subsumed into the larger city, as have such other old Wadi Hanifah towns as Manfuha.





Left: Partially secluded, family-oriented picnic spaces line the bank of the wadi near the dam at al-Elb. Lower: Flow channel engineering keeps winter rains from swelling into destructive flash floods.

## FLOOD CONTROL IN THE DESERT

Riyadh receives an average of 100 millimeters (4") of rain each year. That's not much, but it tends to come in the form of sudden downpours. Only 10 days per year on average have rain, and nearly all come between January and April.

Across the Najd desert that surrounds Riyadh, these rains flow naturally into wadis. Since the Najd tilts from the high ground northwest of Riyadh south and east toward the Gulf coast, all of Najd's small wadis feed their runoff water into one major artery: Wadi Hanifah. This means that by the time waters reach the edge of Riyadh, they have often swelled into a potentially destructive flash flood.

A key feature of the restoration project was to define the wadi's flood flow channel and clear it of garbage and construction rubble, and then to engineer grading and channeling to control its flow and minimize the destructive effects of floods.

my family," he told me. "It was oppressive, too overgrown. Now," and he gave a little chuckle, "I feel like I'm by the Nile. If I get a break, I bring my kids down here to fish."

Further along the shore, I got to talking with Saleh and Osama, two teenage friends who were grilling kebabs on a little barbecue. I asked them how they heard about Wadi Hanifah.

"There was something on TV," they said. "Then we noticed these signs." They gestured to the green-and-gold acacia logo on a location marker nearby. "The first time we came, we thought it would be desert, but this is landscaped. It's really different."

Stone Dam Park is typical of the recreation zones up and down the wadi: Every weekend of the year, they fill with visitors as families and friends eat, play and



relax under shade trees beside the water. At Al-Masane Lake Park, I found a cricket match in full swing among South Asian workers taking advantage of a patch of open ground.

In awarding the restoration project an Aga Khan Award for Architecture, the 2010 jury stated, "The Wadi Hanifah project eloquently demonstrates an ecological way of urban development." Leisure and tourism are obvious winners from the restoration, but as project director Al-Fayzi told me, real-estate prices have risen as individuals and developers seek

itself from a source of embarrassment to one of pride.

This puts Riyadh in global company: When London saw salmon returning to the cleaned-up River Thames in the 1980's, it was as if an old wrong had been righted. When a 2010 study announced that Washington, D.C.'s Potomac River had

regained its beds of river grass, it was a step on the way to expunging the shame of President Johnson's 1965 declaration that Washington's polluted waterway was "a national disgrace."

On the ground, Christopher Walter is witnessing yet further change.

"We are just starting to bring in high-school and university students, so we can establish a knowledge base in environmental education," he said. "Water has completely changed this landscape. This is the first generation to deal with the wadi in its restored state. The story is not over yet." 🌐



**Matthew Teller** is a freelance journalist and travel writer based in the UK. He broadcasts for BBC radio and writes widely on the Middle East for magazines and newspapers around the world. His blog is [www.QuiteAlone.com](http://www.QuiteAlone.com).



**Related articles** from past issues can be found on our Web site, [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). Click on "indexes," then on the cover of the issues indicated below.

Architecture near Wadi Hanifah: N/D 99, J/A 99, S/O 88  
Riyadh: J/A 00, J/F 99



[www.ada.gov.sa/eng](http://www.ada.gov.sa/eng)



# AN “EXTREAMLY CIVILE” DIPLOMACY

WRITTEN BY CAROLINE STONE

Morocco and England today are linked most conspicuously by tourism, but in the 16th and 17th centuries the two countries were more closely connected, both politically and economically. From this period, the surviving

correspondence with North Africa—predominantly Morocco—in the UK State Papers amounts to more than 20,000 folios in various languages, and there were nearly a hundred embassies exchanged among European and North African rulers.

The Anglo-Moroccan connection originates in the quarrels between the two half-sisters Queen Elizabeth I and Queen Mary I. Elizabeth suspected that Mary’s husband, Philip II of Spain, had designs on England, and she was consequently interested in an

In 1588, George Gower painted the “Amanda Portrait” of Queen Elizabeth I, portraying her with her right hand resting on a globe set conspicuously beneath her crown. This was a symbolic assertion of her power following the English defeat of the Spanish Armada, which Gower depicted in the painting’s two background windows. Seven years earlier, Elizabeth had authorized a large shipment of timber to aid Morocco in building ships to attack Spain.





ally who could join in attacking Spain. On the Moroccan side, there was considerable enthusiasm for expelling the Spanish and Portuguese from the several Moroccan coastal cities they had conquered. The Moroccans also wanted naval support in case of further encroachment by the Ottoman Turks, who were eager to extend their empire west from Algiers into Morocco. It was for this last reason that the Moroccan sultan Ahmad al-Mansur was unwilling to collaborate with the Ottomans despite Ottoman consideration of an invasion of Spain: He preferred instead an alliance with the English.

There were also excellent opportunities for trade (See “Moroccan Imports into England,” page 18). As well as commercial exchanges, such as Moroccan sugar and dates for English cloth—or for a bass lute for the sultan—both nations were also interested in war materiel. England wanted Morocco’s excellent saltpeter with which to manufacture gunpowder, while Morocco sought cannonballs and guns, as well as shipwrights and timber for shipbuilding. These were sensitive matters: European powers at times accused England of trading arms to an enemy, and the same reproach was raised by Muslim

During ‘Abd al-Wahid ibn Masoud’s term in London, he negotiated commercial and military trade agreements as well as continued alliance against Spain. Some suggest that the portrait below may have inspired Shakespeare’s protagonist in “Othello,” published a few years after ‘Abd al-Wahid’s embassy. Right: King Philip II of Spain with his wife, Queen Mary I of England, in 1558. The Anglo-Moroccan connection had its origins in the quarrels between Queen Elizabeth I and Queen Mary, who was Elizabeth’s predecessor on the throne. Elizabeth feared that, after Mary’s death, Philip would advance a claim to succeed her.



powers against Morocco.

The third issue was piracy. Here, both Moroccan and English sovereigns’ attitudes varied with the political situation. Elizabeth, for example, tacitly encouraged Francis Drake’s piracy against the Spanish, while at the same time wanting Morocco to rein in the notorious Rovers of Salé and permit ransom for English subjects taken as slaves. The sultan, on the other hand, though anxious to bring Salé under his control, was, like Elizabeth, not loath to profit from the pirates’ activities. In short, there was much to negotiate.

The first recorded English merchant vessel to reach Morocco docked in 1551. In the following year, three ships set sail from Bristol and arrived at Safi and Agadir to unload, among other things, cloth, coral, amber and jet (gem-quality lignite). Twenty years later, in 1576, English merchant-envoys were at the court of Sultan Moulay ‘Abd al-Malik, where they negotiated the exchange of saltpeter for a large quantity of cannonballs. On July 10 of that year, ‘Abd al-Malik wrote to Elizabeth, saying that he was sending her an ambassador. She replied that, in view of the subjects of their negotiations, the ambassador’s visit should be kept a secret. If the visit indeed occurred, then her suggestion was well heeded, for there are no other records of it.

‘Abd al-Malik’s successor, Ahmad al-Mansur, was equally interested in trade with England. In 1581, after Philip II was crowned king of Portugal, Elizabeth gave permission for 600 tons of first-class wood, probably oak, to be felled in Sussex and Hampshire for export to Morocco so that al-Mansur’s fleet might attack Spain. In 1588, after the English defeat of the



The truth of the following story, found in Roger of Wendover's *Flowers of History* under the year 1213, is uncertain because there is no contemporary evidence to either corroborate or contradict it. With that in mind, it is nevertheless so curious a tale that it bears recounting. It goes like this:

King John of England was in trouble on all fronts: with the church, where he had been excommunicated; with the Welsh, who were in revolt; with the French, who were planning to invade; and with his own nobles and people, who were sick of his weak, tyrannical and corrupt government. Indeed, in 1215, he was to be forced to sign the Magna Carta, limiting the ruler's power and giving his subjects a series of legal rights.

"The king in despair sent to the 'Amir al-Mu'minin,' the ruler of Morocco, three envoys "to tell him that he would voluntarily give up to him himself and his kingdom, and if he pleased would hold it a tributary from him; and that he would also abandon the Christian faith, which he considered false, and would faithfully adhere to the law of Muhammad."

The account gives a long, circumstantial description of the envoys' reception by the amir, who was supposedly in his library reading when they were shown into his presence. He asked astute questions about England and its king. We are told that he thought for some time about what the envoys said, and then he rejected

their offer out of hand, calling John a "waverer and a deserter ... a sloth and a coward" for being prepared to abandon his faith and hand over his country to someone about whom he knew nothing, thus "wishing from a free man to become a slave."

The amir dismissed two of the ambassadors contemptuously, saying, "Your King ... is unworthy of any alliance with me." However, he kept back the third, a monk named Robert, and questioned him closely about John and his character. Robert replied frankly. The amir then asked, "Why do the wretched English permit such a man to reign and lord it over them? They are indeed effeminate and servile!"

Robert replied, "The English are the most patient of men until they are offended and injured beyond endurance; but now, like a lion at an elephant when he feels himself hurt, or sees his blood, they are enraged, and are proposing and endeavouring, although very late, to shake the yoke of the oppressor from their necks."

The amir blamed the "too easy patience" of the English, then asked Robert more questions before sending him away with "costly presents," because he was convinced that he told the truth, although he gave the other two envoys nothing. The trio returned to England and told King John of their reception, after which "he wept in bitterness of spirit at being despised by the 'Amir, and at being balked in his purpose."

Spanish Armada, al-Mansur sent an envoy, Marzuq Ra'is, to the court of Elizabeth to discuss a joint attack against Spain. Al-Mansur's letter fairly pleads for secrecy:

When he alights in your company and makes his camel kneel, if God wills, in your valley, you will direct your solicitude towards him so as to receive what he has by word of mouth and so that he may confirm it to you verbally and face-to-face. Then, if God wills, close your fingers upon it and fasten over it the buttons of your thoughts.

Marzuq was well received but the negotiations were inconclusive.

In 1600, al-Mansur sent his private secretary, 'Abd al-Wahid ibn Masoud, to England together with an accompanying

delegation that remained for six months. Ostensibly on a trade mission, 'Abd al-Wahid was also quietly negotiating the alliance against Spain and, on both sides, the purchase of war materiel.

Like other foreign visitors, 'Abd

al-Wahid would have generated a great deal of interest both at court and in the street. A striking portrait of him now hangs at the Shakespeare Institute at Stratford-on-Avon. Some scholars have suggested that the interest in North Africa

that 'Abd al-Wahid helped generate inspired Shakespeare's 1603 "Othello," although the play's plot is based on an earlier Italian story.

The death of both Elizabeth and al-Mansur in that same year, and subsequent struggles for succession in Morocco and, later, the Civil War in England, shifted relations between the two countries, but the underlying common interests endured. On several occasions, James I sent an ambassador, John Harrison, to negotiate both for the liberation of British captives and, with the *de facto* ruler of Salé, for a joint offensive against Spain. He later wrote a short biography

#### MOROCCAN IMPORTS INTO ENGLAND 1574 - 1575

ITEM	AMOUNT	VALUE
Refined sugar	2068 chests <sup>1</sup>	£ 20,680.0.0 <sup>2</sup>
Unrefined sugar	585 hogsheads <sup>3</sup>	£ 3,873.0.0
Molasses	217 tons	£ 2,170.0.0
Almonds	604 cwt <sup>4</sup>	£ 1,208.0.0
Aniseed	12 cwt	£ 69.6.8
Ostrich feathers	190	£ 47.10
Dates	120 cwt	£ 240.0.0
Suckettes (sweetmeats)	1400 lbs	£ 64.3.4
Marmalade	600 lbs	£ 20.0.0
Goatskins	3200	£ 266.13.4
<b>Total</b>		<b>£26,638.13.4<sup>5</sup></b>
Customs duty paid		£ 1431.19.0 <sup>6</sup>

<sup>1</sup> 1 chest = approx. 136 kg / 300 lb

<sup>2</sup> It has been estimated that £1 in 1575 = us\$250 to \$300 today: The amount is thus on the order of \$6 million. Amounts are denominated in pounds, shillings and pence (£.s.d.)

<sup>3</sup> 1 hogshead = approx. 240 liters / 57 us gal

<sup>4</sup> cwt (hundredweight) = 51 kg / 112 lb

<sup>5</sup> Close to \$8 million

<sup>6</sup> About \$420,000





of the Moroccan ruler titled *The Tragical Life and Death of Muley Abdala Malek*.

In 1637, Jawdhar ibn 'Abd Allah arrived in London on an embassy to Charles I. Like the other ambassadors, he attracted enormous attention, and indeed,



a booklet was even published for those who had not had the good fortune to witness the events: *The arrivall and intertainments of the Embassador Alkaid Jaurar ben Abdalla*.

The frontispiece is an engraved portrait of the ambassador, who was from the Coimbra region of Portugal. Captured and castrated when he was eight years old, he rose to become a trusted advisor of Moulay Muhammad, the first sultan of the 'Alawi

In 1637, the pomp and ceremony of Jawdhar ibn 'Abd Allah's embassy to King Charles I, far left, prompted publication of a booklet describing the events. This engraving of the young ambassador, left, appeared on its cover.

Dynasty that still rules Morocco today. High on his agenda were the enduring problems of piracy and illegal trading; however, as a goodwill gesture, he was accompanied to London by a number of English slaves freed by the sultan.

Unfortunately, although Jawdhar was quite young, fits of ill health—perhaps malaria—interrupted

the program planned for him. Nevertheless, he entered London with great ceremony: He and his escort traveled by barge from Greenwich to the Tower of London, “where they were attended by thousands and tens of thousands of spectators.” Riding in the king's own coach, he was attended by “at least 100 coaches more, and the chiefest of the citizens and Barbary merchants bravely mounted on horseback, all richly appparelled, every man having a chain of gold about him: with the Sheriffs

## SCIENCE AND THE SULTAN

We learn a little more about ambassador 'Abd al-Wahid from a letter sent from a friend in Marrakesh to Edward Wright, an English mathematician and navigation expert. It bears on the intellectual interests of Moroccan sultan Moulay Hamed, and in particular to his wish to acquire the latest scientific instruments:

This King Muley Hamet is much delighted in the studie of astronomie and astrologie, and valueth instruments serving for the course of the sunne and moone that are of rare device, exceedingly; wherefore your spheare, your watch, your mundane diall and your sextans, your new magnetically instrument for declination, or any astrolabe that hath somewhat extraordinarie in it, will be accepted; and you might sell the same at good prices.

Wright was told that the master of the ship “will bring him unto you, unto whom I would have you shew all the variety of instruments that you have, either in your owne hands, or have sold and lent to others; that hee may choose some for the Kings use and his owne. You may show them also the draughts and lineaments of whatever you have in paper; all of which I know will make them admire and be desirous to have some that they can understand how to use.”

It may have been incidents such as this that made some London merchants fear that 'Abd al-Wahid was not only an ambassador,

but also what today would be called an industrial spy. The cultural exchange was never a simple one. Several of the instruments were Arab in origin, but England was by this time sending improved models to the Islamic world and, with a view to success in export, making every effort to make them attractive. Wright's friend wrote:

You may cause to be framed some instruments in brasse or silver, leaving the spaces for Arabique words and figures, yet drawing the pictures in paper exactly, and setting downe the Latine figures and the words in Latine or Spanish, which is farre better. There will be found here that can grave the same in Arabique upon the instruments, having some direction from you about the matter; or Abdala Wahed, being a perfect pen-man, can set the Arabique letters, figures and words downe very fair; and so any of our gravers can worke the same in metal, having his writing before them.

The tradition continued: For example, a gift to Moulay Ismail in 1704 included “a large Double microscope with an Arabic inscription on the Pillar of Brass (signifying God hath created strange and wonderfull things for Our Instruction, and his Power is in all generations) with all things belonging thereto.”





Muhammad ibn Haddu, right, on his mission to King Charles II, left, made the most lasting impression of all the North African sultanates' diplomats. Impeccable courtly manners, displays of horsemanship and an appreciation of English theater made him "the fashion of the season."

and Aldermen of London in their scarlet gowns with such abundance of torches and links, that though it were night, yet the streetes were almost as light as day."

On November 5, after a fortnight's rest to recover his health, the ambassador rode out in another great procession to meet the king. The order is described in detail in *The arrivall and intertainments...*, including the liberated slaves and a gift of highly prized Barbary horses, one of which was said to be worth more than \$250,000 in today's money. All London turned out to cheer, and it seems that the ambassador was delighted, although later disappointed he was not well enough to attend the lord mayor's show, which he had his attendants describe to him in detail.

The booklet describing these events,

Although none of the many proposed Anglo-Moroccan attacks on Spain ever came to much, their joint efforts against piracy were often more successful.

which included a short description of Morocco, was written not as part of official diplomatic correspondence, but rather for a British public eager for information. It is therefore interesting to read how warmly the author speaks of the ambassador:

This Alkaid Ambassador hath an innated inclination to any thing that is noble, worthy and befitting a gentleman; he is devoute and zealous in those wayes and rules of religion wherein he hath beene brought up.... Hee is courteous, bountifull, charitable, valiant, and a severe punisher of enormities, as drunkenesse, or any prophanesse in his house; he speaks the Spanish, Italian and Arabian tongues; and in a word, for humanity,

morality and generosity, hee is a most accomplish'd gentleman.

Some years before Jawdhar ibn 'Abd Allah's mission, the English had been dissuaded from acknowledging the legitimacy of the breakaway state at Salé, and Charles I had refused to ratify the agreement brought by its envoys. Moulay Muhammad's long letter to Charles on this occasion was intended largely to promote trade cooperation and, as fellow monarchs, to join forces to suppress rebellion and piracy. It was subsequently published as a pamphlet for the general public:

Now because the islands which you Govern, have ever been famous for the unconquered strength of their Shipping, I have sent this my trusty servant and Ambassador, to know whether in your Princely wisdom, you shall think fit to assist me with such Forces by Sea as shall be answerable to those I shall provide by Land.

While for a variety of reasons none of the many proposed Anglo-Moroccan



attacks on Spain ever came to much, the joint attempt to clear out the nests of pirates “that have so long molested the peaceful Trade” was, at this particular moment, more successful.

Years later, another embassy made great impact on the general public, the nobility and even the academic world: that of Muhammad ibn Haddu, always referred to in the English sources as “Ben Haddu.” This was less because of his negotiations than because he seems to have had wide interests, and he kept very much in the public eye. As John Evelyn puts it in his diary, “He was the fashion of the season.” Ben Haddu discussed the usual issues, peace and a trade treaty, though the document was never ratified. (This in spite of the diarist Anthony Wood’s entry for February 16, 1682, which states that “an everlasting peace was concluded between our king and the emperor of Morocco by his ambassador in London.”) This was largely because the English continued to occupy Tangier, which gave them control over the Straits of Gibraltar, and because some English



Dating from 1651, this section of a Venetian nautical map, oriented with west upward, shows coastlines, harbors, ports and ruling powers. While North Africa, the Iberian Peninsula and Europe received the cartographer’s detailed and even creative attention, he drew no ruling house at all in Great Britain.

## FROM THE DIARY OF JOHN EVELYN

1682 JAN 11TH

To Lond: Saw the *Audience of the Morocco Ambassador* [Ben Haddu]: his retinue not numerous, was received in the banquetting-house both their majesties present: he came up to the Throne without making any sort of Reverence, bowing so much as his head or body: he spake by a *Renegado English* man, for whose safe return there was a promise: They were all Clad in the Moorish habite Cassocks of Coloured Cloth or silk with buttons and loops, over this an *Alhaga* [haik] or white wollen mantle, so large as to wrap both head & body, a shash or small *Turban*, naked leg’d and arm’d, but with lether socks like the *Turks*, rich *Symeters* [scimitars], large calico sleeved shirts &c. The Ambassador had a string of Pearls oddly woven in his Turbant; I fancy the old Roman habite was little different as to the Mantle and naked limbs: The Ambassador was an handsom person, well fetur’d, & of a wise looke, subtile, and extreemly Civile: their Presents were *Lions and Estridges* [in fact two lions and 30 ostriches] &c: Their Errand, about a Peace at Tangire [Tangiers] &c. But the Concourse and the Tumult of the People was intolerable, so as the Officers could keepe no order; which they were astonish’d at first; There being nothing so regular exact & perform’d in silence as all these publique occasions of their Country, and indeede over all the Turkish dominions.

JAN 24TH

This Evening I was at the Entertainment of the Morroco [Ambassador] at the Dut[chess] of *Portsmouths* glorious Appartment at W[hite]hall, where there was a greate banquet of *Sweetmeates*, & *Musique* &c but at which both the *Ambassador* & *Retinue* behaved themselves with extraordinary Moderation & modestie ... neither admiring or seeming to regard any thing, furniture or the like; and but decently tasting of the banquet: They drank a little Milk and Water, but not a drop of Wine, also they drank of a sorbet & Jocolatte [chocolate]: did not look about or stare at the Ladys or expresse the least surprise, but with a Courtly negligence in pace, Countenance, & whole behaviour, answering onely to such questions as were asked, with a greate deale of Wit and Gallantrie, & so gravely tooke leave.... [The Ambassador] went often to *Hide-Park* on horse back, where he and his retinue shewed their extraordinary activity in Horsemanship and the flinging and Catching of their launces at full speede; They rid very short & could stand up right in full speede, managing their speares with incredible agility. He also went sometimes to our *Theaters*, where when upon any foolish or fantastical action he could not forbear laughing, he endeavoured to hide it with extraordinary modesty & gravity: In a word, the *Russian Ambassador* still at Court behaved himselfe like a Clowne, compar’d to ... [the Moroccan Ambassador]

—*Diaries*. John Evelyn, E.S. de Beer, ed. Oxford, 1955.



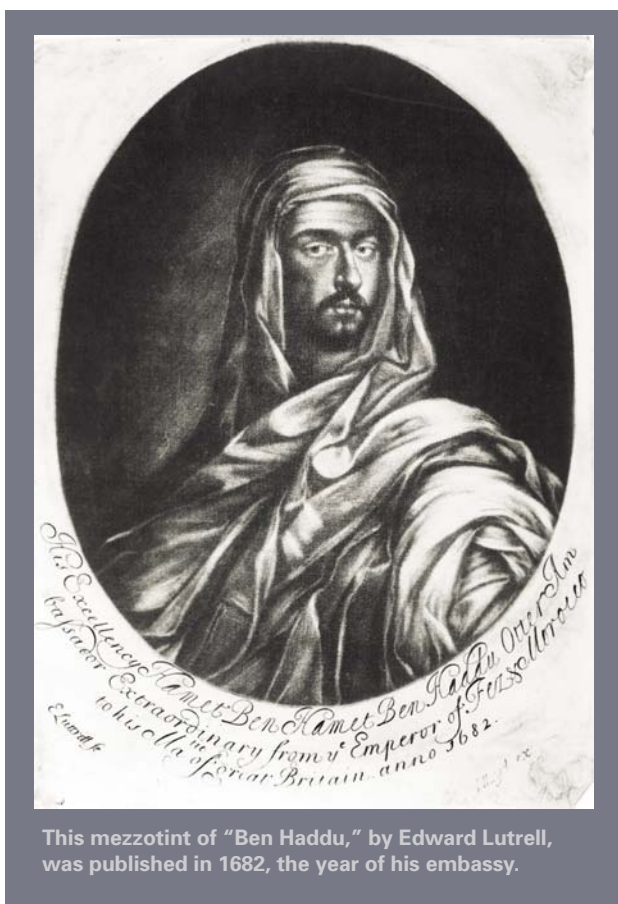
merchants continued to trade illegally and not pay the required taxes.

Ben Haddu immediately won the approbation of the crowds by his splendid horsemanship (See “From the Diary of John Evelyn,” page 21) and of his peers by his exquisite manners. He seems to have used his six months in England to experience as much of the country as possible. He visited the Royal Society, which had been founded officially in 1660, and on May 31, 1682 he was given the unusual distinction of being made an honorary fellow; his signature is to be seen in their register. He may even have met one of its founding members, Sir Christopher Wren, when he went to look at construction work on St. Paul’s Cathedral, where he made a gift to the workmen of £15 (worth about \$3000 today). His sultan, Moulay Ismail, was passionately interested in architecture and was at the time in the process of transforming his royal city, Meknès, so Ben Haddu probably passed on a detailed account of the occasion.

His travels outside London took him primarily to Oxford and Cambridge and from there to Newmarket, then as now a great center of horse racing and breeding. This would surely have been of particular interest, since North African barbs were highly prized, and there, once again, a display of horsemanship by himself and his companions was met with great admiration.

At Cambridge, the entertainment was more sober. There had been a chair of Arabic there since 1631, funded by a merchant, Thomas Adams. The university granted Ben Haddu an academic distinction—perhaps an honorary degree—but the banquet offered by the vice-chancellor was less successful. Possibly because they were unsure of his dietary prohibitions, the meal was composed of fish, including eels and sturgeon, and after it, the ambassador had to lie down at the provost’s lodgings at King’s College until he recovered enough to depart.

There is a detailed account of his visit to Oxford in the diary of Anthony Wood, who recorded that he stayed at the Angel Inn, the best hotel in the city, preferred by nobles and even royalty. There, he would also have had the benefit of the two oldest coffee houses in England, established a few years earlier. One of them, the Queen’s Lane Coffee House, is still in existence



This mezzotint of “Ben Haddu,” by Edward Lutrell, was published in 1682, the year of his embassy.

today. But judging by Wood’s diary, Ben Haddu would have had little time for drinking coffee. First, a reception by the notables of the university, at which the distinguished Arabist Edward Pocock said “something in Arabick which made him laugh,” and then on the following day what must have been a most exhausting tour:

In the morning about 8 or 9, he went to Queen’s College and saw the Chapel, hall, and had a horne of beer but did not drinke. – Thence to the Physick Garden where Dr Morison harangued him. – Then to Magdalene College where the president spake something to him; went into the chapel, beheld the windows and paintings; thence round the cloister. – And so to New College where he saw the chapel while the organ played. – Thence to St John’s. – Then to Wadham [Wren’s college]. – Thence to All Souls; saw their chapel. Thence to University College. – And so home to the Angell.”

Interest in Morocco, the Arab world and Islam was undoubtedly stimulated by these direct contacts.

Again unwell after dinner—the ambassador arrived late at the formal reception at the Sheldonian Theatre, where there were more speeches and music. Once again, his presence caused a sensation. Wood relates:

’Tis thought that there was in the Theater 3000 people, and a thousand without that could not get in; never more people in it since it was built [some 20 years earlier, by Wren] – He went thence up to the public library, where he was entertained by an Arabick speech by Dr Thomas Hyde [official interpreter to the court] which he understood.

The day continued with more sightseeing and a banquet. At the end of this very long day, “the vice-chancellor presented to him certaine books in Arabick.”

We do not know which books he was given, but it is tempting to think that they included copies of Pocock’s own editions and translations of Arabic texts, such as his

1661 translation of al-Tughra’i’s famous *Lamiyyat al-‘Ajam* (*Qasida Rhyming in L*) from the 12th century—the first major work of Arabic poetry to be introduced to a western audience.

Interest in Morocco, the Arab world and Islam was undoubtedly stimulated by these direct contacts, and Ben Haddu was in this sense an excellent cultural ambas-

sador. Throughout the 17th century, Oxford in particular had been building up its collection of manuscripts, as merchants returning from North Africa and the Levant were encouraged to bring back at least one book. Medical students were supposed

to have a basic knowledge of Arabic in order to read the medical texts, although probably few of them did.

At the popular level, the interest was even more striking: Newspaper articles, pamphlets, poems, histories and plays abounded. Many ambassadors, from various countries, were taken regularly to the theater as part of their official entertainment, but they often returned for their own pleasure, sometimes asking for



## LETTER FROM BEN HADDU TO CHARLES II FROM MEKNES, AUGUST 5, 1683

In the latter 17th century, the Moroccan ambassadors tried to negotiate with England over Tangier. In 1661, the city, held by the Portuguese, passed to Charles II together with Bombay (Mumbai) as part of the dowry of Catherine of Braganza, whom Charles married in the following year. Ambassador Ben Haddu, on his return home, sent Charles a detailed letter warning that Charles would do better to yield Tangier, and could make excellent conditions for doing so, because the Moroccan sultan, partly due to Ottoman pressure, was determined to reclaim it. Ben Haddu explains his own motive for aiding Charles:

When I came to you, ... you treated us with the benevolence with which you never treated anybody whether the ambassadors of the Greeks or the ambassadors of the Indians and gave us preference over all of them and raised us over all of them, and gave us the entrée to your house and made us acquainted with your secrets and your diwan and introduced us to your sons and the people of your household.... As for me, I have done my best to advise you and alert you to what is in your interest and wellbeing. If you fulfil my desires this time and conceal my

secret and cut up my letter after reading it, and let nobody read my letter except yourself and your private secretary, and you reply to my letter to say what is in your secret heart, and swear to me on the Book that you have cut it up and concealed it, and you inform me of everything you know, then by God we shall inform you of everything that may happen hereafter.

Charles ignored the ambassador's advice—regarding both Tangier and the letter.



Situated on the southern side of the Strait of Gibraltar, Tangier was a strategic key to control of Mediterranean trade. This view, dating from about a century before Ben Haddu's correspondence, likely shows a considerably smaller port and city than existed in Ben Haddu's time.

a particular play. Ben Haddu saw "The Ingratitude of the Commonwealth"—a version of "Coriolanus" "with dancing." A few days later, he was "extreamly pleased" with "The Tempest," went to "The Bloody Brother" and "to his great satisfaction" saw "Macbeth," among other productions. It is not clear whether or not he saw "The Empress of Morocco," a great success and one of a number of plays on Moroccan and Middle Eastern themes written to satisfy the popular interest. Later ambassadors showed equal interest in the theater, although in 1724 ambassador 'Abd al-Qadir Perez seems to have preferred more romantic and less political plays.

Trade with Morocco, and the visits of the Moroccan ambassadors, undoubtedly fed interest in the Muslim world and encouraged reappraisal of the relationship between Christian and Muslim spheres of influence. It is harder to know, however, what influence the experiences of the

ambassadors themselves may have had back home in Morocco, because so much less has survived in the way of contemporary records—although material is still surfacing.

In terms of political negotiation, the embassies were less successful. It was unfortunate that Charles II ignored Ben Haddu's private advice (See "Letter from Ben Haddu...", above) and, instead of selling or bartering Tangier, elected to destroy and abandon it. This failure to pay due

attention to Moroccan intelligence was to be repeated in the early 18th century, as the frustrating experiences of the ambassador Ahmad Qardanash make clear, and such carelessness worked to England's detriment. By and large, the ambassadors' attempts to arrange treaties met with limited success due to reservations on both sides, but as cultural ambassadors, their roles were invaluable, and the two countries remained on largely amicable terms for several centuries. 🌐



**Caroline Stone** (stonelunde@hotmail.com) divides her time between Cambridge and Seville. Her latest book, *Ibn Fadlan and the Land of Darkness*, translated with Paul Lunde from the medieval Arabic accounts of the lands to the far north, was published in December by Penguin Classics.



**Related articles** from past issues can be found on our Web site, [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). Click on "indexes," then on the cover of the issues indicated below.

Barbary horses: J/F 07  
Rovers of Salé: S/O 11  
us ambassador to Morocco: S/O 98



# Ramadan in the Farthest North

Written by Alia Yunis  
Photographed by Tor Eigeland







**D**isembark at the fog-shrouded, mountain-rimmed, Arctic-gateway harbor of Tromsø, Norway, walk along the cobbled main street with its wooden homes and shops painted bright reds, blues and yellows, and take a left just before the pet shop. There, next to the Natural Medicine Center, you will find Alnor Senter, a simple square building. The former dance studio is now the world's northernmost mosque. Alnor Senter shares that superlative with much else in Tromsø, including the world's northernmost Protestant cathedral, the northernmost botanical garden, the northernmost brewery and the northernmost symphony orchestra.

A bit above 69 degrees north latitude, 350 kilometers (215 mi) above the Arctic Circle, it's almost as far as you can get from the heat and desert winds of the land of Islam's origin. Tromsø was formally founded in 1794 and has been the starting point of international polar expeditions—in fact, this year the city is celebrating the 100th anniversary of the arrival of Norwegian hero Roald Amundsen at the South Pole. For much longer, fishermen and traders of whale, cod and seal-skin have come here. Reindeer herders have lived here longest of all. Recently, international medical researchers have arrived, seeking clues to cures from the sea. Since the mid-1980's, the farthest-traveling voyagers to this city of 67,000 are Tromsø's 1000 or so Muslims, many of whom have come from the Mideast and North Africa.

When you walk into Alnor Senter, one of the first people likely to welcome you is Hakima Mabrou, who laughs about the first time she saw Tromsø. "I got married in Morocco to a man who was already living in Norway. I thought, 'Wow, I'm going to go live in Europe! How glamorous!' It was like my own kind of 'American dream.' I arrived in April 1997, and there was a record snowfall of two and a half meters (98"). I couldn't believe what I was seeing when I got off the plane, and I thought, 'Welcome to my new dream!'"

Things got stranger for her in a couple of months. Each March and September, Tromsø's days and nights are of equal length. But in summer, Tromsø is part of the Land of the Midnight Sun, and in winter, the Land of Polar Nights: From May 20 to July 22, the sun remains above the horizon and never sets, and from November 25 to January 21, it does not peek above the horizon.

At Alnor, this raises a uniquely Muslim conundrum: When there is neither sunrise nor sunset, at what times does one perform the *fajr* (dawn) prayer and the *maghrib* (sunset) prayer? And what happens when the month of Ramadan, which requires fasting from sunrise to sunset, falls in high summer or deep winter?

Left: Long a gateway to the Arctic for fishermen, hunters and explorers, Tromsø now increasingly lures marine-based and other medical researchers from around the world. Right: Open since 2005, Alnor Senter in downtown Tromsø is the world's northernmost mosque, and it counts some 450 members.







**Tromsø owes much to its location along the northern reaches of the Gulf Stream, which both moderates its climate and makes fishing boats such as these emblematic of its historic economy, cuisine and identity.**

“What to do during the Midnight Sun and on Polar Nights has been a big point of debate for us,” says Sandra Maryam Moe, deputy director of Alnor. Her husband, Andrew Ibrahim Wenhem, is the mosque’s registrar, overseeing the legal paperwork of marriages, divorces and deaths. “We finally asked a shaykh in Saudi Arabia, and he gave us a *fatwa* [instruction] with three choices: Follow the timetable of the nearest city that does have a sunrise or sunset, or estimate the time and set a fixed schedule. We decided to follow Makkah for the part of Ramadan that falls under the Midnight Sun or Polar Nights, and then, for the other times, we follow our own sun.”

This year, with Ramadan falling between August 1 and August 29, fasting begins with the 2:30 a.m. sunrise and ends with the 11:00 p.m. sunset in early Ramadan. Chilly daytime temperatures, even in August, help make the 20½-hour fast easier, and by the end of the

month, sunrise is at 4:45 a.m. and sunset at 8:45 p.m., so the fast lasts only 16 hours.

Inside Alnor one night during the last week of Ramadan, just after 9:00 p.m., spirits are running high. The women have gathered in one section and the men in another, all talking and eating as children chase each other between the sections. Throughout the month, women have been taking turns preparing the daily *iftar*, or post-sunset fast-breaking dinner, and the food on tables on any given night reflects the diversity of the community: Somali samosas, Iraqi pilaf, Finnish pasta salad, Norwegian cakes. Although Alnor members come together to be family in one sense, their exposure to new cultures goes beyond the obvious encounters with Norwegian ways and people.

“Are you speaking Palestinian together?” a newly arrived Pakistani woman asks two Palestinian women she has just met. They explain with smiles



that, no, their language is Arabic—although there is much Norwegian and English tossed in.

After eating together, Sandra, Hakima and 10 other women form a line, facing southeast toward Makkah, shoulder-to-shoulder in the sparsely furnished prayer room.





Sandra works as a translator of Islamic texts from English to Norwegian. “Most people here read the Qur’an in English because the Norwegian translation is not strong,” she explains. “We’re trying to improve that.”

Alnor has nearly 450 members. They, as well as the non-practicing Muslims in town, can be found throughout the city, working as engineers, medical researchers, shop owners, kitchen help and just about everything in between. (A small group, predominantly Somalis, belong to the town’s other mosque, which is simply an unnamed green house.)

Tromsø’s first immigrant Muslims arrived in 1986, when the Norwegian government opened a refugee center in Tromsø and welcomed a group of Iranians. Today, Somalis are the largest refugee group, both in Tromsø and in Norway as a whole. Moroccans are the largest national Muslim contingent in Tromsø with working immigrant backgrounds. Norwegian converts like Sandra are but a handful. Norway takes in around 15,000 political refugees annually, and in 2010 they included more than 2000 Somalis and about as many Afghans and Eritreans. Like the US and

**Nowadays, Tromsø is not just about fish and reindeer. “I’d say about half my customers are Norwegians,” says Huseyin Kartay, who, with his wife, Seuda, at left, owns Alaniya International Marketplace, one of the city’s three globally oriented food stores. “They are interested in cooking foreign foods now.”**

other countries, Norway also has an annual visa lottery system that admits around 20,000 workers, predominantly from Sweden, Eastern Europe and countries in Asia and Africa.

The immigrants are required to learn Norwegian, get new jobs and adapt to their new locale: In this town, adapting means, among other things, joining crowds in the popular water-front restaurants to savor the local

fare, which includes smoked whale, reindeer steak and seal soup.

“I have taught many of my Alnor friends how to make really tasty Norwegian fish cakes,” says Sandra, adding that, for her and her six children, reindeer is a special food, but she sees immigrant appetites better whetted by Tromsø’s seafood bounty.

**In the main square, Norwegian prime minister Jens Stoltenberg makes a local campaign appeal to Tromsø voters. A few days later, although he and his Labour Party coalition win nationally, they narrowly lose in Tromsø.**





It also means joining each February what is jokingly called “Tromsø’s Formula One”—the National Reindeer Sledding Championship, held on the city’s main street. In the summer, on Tromsø’s sometimes postcard-perfect sunny days, crowds spill onto the streets from sidewalk cafés as people catch up with friends over endless cups of coffee. Later, Tromsø’s several nightclubs will come to life, just around the time the people at Alnor break their Ramadan fast.

With the changes in surroundings, foods and language, many immigrants also experience changes in their relationship to Islam.

Hakima says that, in Morocco, she grew up with little connection to her religion. But soon after she arrived, she became friends with two Norwegian Muslims, and she wondered how these two, with no heritage connection, could be so committed. “I started to know my religion through them,” she says.

Hakima’s husband, however, has been largely absent since their divorce four years ago. “If the Norwegian government didn’t force him to pay child support, he wouldn’t,” she says. She and her three sons now live in a small, minimally furnished white house off one of Tromsø’s mountain roads, where they get around by bike or bus or on foot. “No one needs a car here,” Hakima says. “You can walk around at any time and not be worried, light or dark.” She knows from experience: For years, she worked as a baker in town, mostly at night.

This month, she wakes the boys up at 3:00 a.m. for the *sahur* (pre-dawn meal). “I don’t ask them to fast,” she says. “They love going to the mosque for iftar. Many at the mosque are like fathers to them.”

Her children speak comfortably in both Arabic and Norwegian, particularly gregarious Ossama, 10. Hakima says she knows her kids are Norwegians because they love snow. Ossama says he never wants to leave Norway. He points to an animal hide hanging on the wall, a common motif in Tromsø homes. “But this isn’t a seal,” he boasts. “It’s a Moroccan cow.”

When asked what his friends at school think of his fasting, he smiles. “They think it’s cool that I can do all my sports training without drinking any water or eating.”

While working nights, Hakima realized she wasn’t spending enough time with her boys as they approached their teen years. She now studies bioengineering at the University of Tromsø, and she hopes to earn her master’s degree one day.

The University of Tromsø—yes, it is the northernmost university in the world—is

the largest employer in the city and the reason Tromsø’s population has doubled since it opened in 1973. “Because of the Gulf Stream, we are very different from other places in this latitude,” says professor emeritus Randi Rønning Balsvik. “We have relatively mild weather—the average January temperature is minus five degrees centigrade (23°F)—so we have always been a center for ship repair and trade, especially seal hunting and fish freezing and canning, but those industries have crumbled. We now have a knowledge industry. We’re a center for high-tech and medical research, particularly biological marine research.”

It was the university that four years ago brought Belal and Maisoon Al Jabri, both in their early 30’s, from Aleppo, Syria. Belal earned his medical degree at the university, and is now doing rotations at the hospital in addition to cardiovascular research. Maisoon is working on her doctorate in the medical genetics department.

Belal looked into schools in other countries, but Tromsø, he found, was more affordable than others, and it had a solid reputation. Mastering Norwegian took them about two years.

In the two-story house they own and

Below and right: **Maisoon and Belal Al Jabri both came to Tromsø from Syria for the opportunities its university offered in medicine—and they spent two years mastering Norwegian. One day, says Belal, “I’d like to see a first-class research center in Aleppo.”**







live in with their daughters, Lene, 4, and Sanaa, 2, they follow Makkah time during Ramadan. “That is the only way that makes sense to us,” Belal says as Maisoon lays out the family’s iftar, which includes not only Syrian traditions like *sous* and lentil soup, but also a fresh salmon with dill sauce and two kinds of potatoes. Some foods are crossovers: Both cultures like to flavor savorys and sweets with cardamom. Syrian *sous* is a licorice-root drink, and licorice happens to be a Tromsø obsession, evidenced by the competing brands that can take up half an aisle in a grocery.

Sometimes the Al Jabris are joined for iftar by friends, mostly other doctors and researchers with Arab roots, including one who jokes he is “the northernmost Syrian in the world.” However, most of their neighbors are Norwegians. “They call this the doctors’ neighborhood,” Belal says. “But, for example, one of the men on the block works in construction. There are differences in education here, but not so much in salaries, unlike in the Middle East.”

The Al Jabris hope to go home one day to give back to their birthplace all they have learned here. “I’d like to see a first-class research center in Aleppo,” says Belal, and Maisoon nods.

Regardless of which timetable people use to break the fast in Tromsø, they

still do it in the traditional way: One begins iftar by eating a date. And here, dates mostly come from Alanya International Marketplace owned by Huseyin and Seuda Kartay, one of three food import stores in Tromsø.

“When are you getting more *habaneros* in?” a young American man asks Huseyin one morning.

“Wednesdays and Fridays are when the fresh vegetables come in,” Huseyin explains. “By Saturday they will be gone.”

The store is lined from floor to ceiling with Indian, Asian, Tex-Mex and Middle

Eastern cans, jars, bottles and packages, with no space wasted. Many of the items have been requested by customers, who come from all over the globe.

When Huseyin first came here in 1996, such a shop wouldn’t have been possible. “Back then, when I would see a dark

face or black hair, I would want to shout, ‘Hello, my brother!’” he grins. “Today there are so many people from so many places, although it is still very much Norwegian. I’d say half my customers are Norwegians—they are interested in cooking foreign foods now.”

Huseyin came here from his native Turkey, where he was working in tourism. There, he met a Norwegian woman whom he followed back home and married. Soon they had a son, who is now 15.

“After we divorced, I visited Turkey, and my family introduced me to Seuda,” who is Kurdish, like him. “When she came back with me, she didn’t like that I owned a café that served alcohol. I saw the hypocrisy, and in 2002 I opened this shop instead.”

He and Seuda have two sons, and he says his family is very Norwegian—they ski, go mountain hiking and pick blueberries

**Hakima Mabrou, from Morocco, laughs when recalling her arrival in Tromsø after a record snowfall. “I couldn’t believe what I was seeing!” A mother of two, she now studies bioengineering at the university.**

in the autumn. “My kids play football and swim—they have more opportunities here,” he says. But in the winter, during his 12-hour workdays, he often thinks of Turkey. “The dark and cold are a big problem. It’s boring, stressful, depressing. It is hard to stay here a long time.”

The weather, along with the high cost of living, is the reason that Tromsø will probably not grow into an immigrant enclave. The Norwegian government requires immigrants to stay in the city they are assigned upon arrival for at least two years. After that, many head south to Oslo or Bergen.

“Actually there are also studies that show some people get depressed in the Midnight Sun, rather than the dark,” says Einar-Arne Drivenes. He is a professor at the university as well as a leading polar-area historian and a native of the region who says he loves both the sun and the dark. “Neither immigration nor multiculturalism is new to the high north, like they are to Oslo and southern Norway,” he explains. “The high north, unlike the south, was never homogeneous. We have the Sami [reindeer-herding native people, known for hunting and fishing skills, who live across Arctic Scandinavia] and huge groups of Finns who came here in the 1800’s. As a trading center and center for polar exploration, and now oil, Tromsø has always had people come and stay here for long periods of time. What’s new with the Muslims is that this is immigration from a different part of the world, so I think the gap is bigger than in the past.”



When asked what his friends at school think of his fasting, Ossama Mabrou smiles.

“They think it’s cool that I can do all my sports training without drinking any water or eating.”





Set out for 'Id al-Fitr, the feast at the end of Ramadan, the Alnor Senter's traditional Norwegian *kakebord*, or "cake table," features waffles, homemade strawberry jam and *grønn genser* ("green sweater cake"), a local specialty named for its topping of green marzipan—the sweet almond paste so popular throughout northern Europe.

The "past" refers to the early-20th-century government effort to "Norwegianize" minority groups—particularly the Sami, many of whom were forced to give up their nomadic ways and culture. Most Tromsø residents, and particularly the many who, like Drivenes, have Sami heritage themselves, are ashamed of that history, and so today there is a reverse effort to promote Sami identity and, along with that, an effort to welcome others as they are.

And thus not all of the newcomers in town are Muslims. The pews at the Catholic church are filled with Africans and Indians on a Sunday morning, as well as hotel and service workers from Poland and Lithuania. In largely secular Norway, the landmark Tromsø Cathedral, a Lutheran church, is sparsely attended.

"I go to church for Christmas, weddings, and funerals," is the usual response when you ask non-immigrant locals about their religious practices.

Sandra remembers this from her childhood. Pride in her Tromsø heritage is clear as she points out where her grandfather lived, and she talks about her favorite areas of the countryside, her memories of vacations in mountain huts and the fishing spots she'd show you if only the weather would clear up.

As a teenager, though, she felt restless, she says. She spent years traveling and looking for adventure with her husband, Andrew, whom she met when he came to Tromsø on a European skydiving tour. Later, it was a skydiving accident and a broken

femur that brought them back to Tromsø.

She was 28 then and she started exploring religion. She asked Andrew to read the Qur'an with her so she could discuss it with someone, and it was not long before they became Muslims together. Later, Sandra felt the need of a place where the Muslim community could come together.

In 2005, with the help of a private donor, the community bought the building that is now Alnor Senter. Sandra says the center started out with 150 people and has continued to grow since, adding events like weekly women's and children's discussions at which the requisite Tromsø snack—waffles with jam and *gjetost*, a Norwegian

brown cheese made from condensed goats' milk—is served with coffee.

These days, Sandra often stops by her 82-year-old mother's clothing shop on the main street, often with her children in tow. "People don't ask me about my daughter converting anymore," says Sonja Kjoer. "It was strange at first, but now it has been 18 years."

"It is not always easy organizing things," Sandra smiles. "For example, when I went to rent Tromsøhallen for 'Id, I couldn't tell them actually what day that would be, which is hard to explain to people who don't know about Ramadan."

Tromsøhallen is a gymnasium on the outskirts of the city. On the morning of 'Id

al-Fitr (the post-Ramadan holiday, pronounced eed ahl-fit-ur), it fills with Muslims, some of whom van-pooled from as far away as Alta, 400 kilometers (250 mi) north, or Hammerfest, 540 kilometers (335 mi) north. (Last year, both cities opened community centers which, if they

grow to become mosques, will strip Tromsø of its bragging rights to the "northernmost mosque.")

When some 250 men and 100 women are all gathered, and the indoor hockey nets have been pushed aside, an imam, visiting

Not all of the newcomers in town are Muslims. The pews at the Catholic church are filled with Africans and Indians on a Sunday morning, as well as hotel and service workers from Poland and Lithuania.



For the prayers that are customary on the morning of 'id, Alnor Senter rented a gymnasium.





Asked if she would be disappointed if her children don't remain Muslims, she gets thoughtful. "I raise them to love who they are and be proud of who they are. I hope they will feel as rich as I do because of Islam. But I also remember what the Qur'an says: 'There is no compulsion in religion.'"

In Tromsø's main square, there are frequent festivals, and vendors and organizations often set up booths while families and friends gather on the main street. On one such day, people stop by the Alnor Senter booth just as they might stop at the booth of the Moroccan woman selling cloudberry

**Left: Sandra Maryam Moe, deputy director of Alnor Senter, drops by with her daughter Shahida, 7, to visit her mother, Sonja Kjoer, at Sonja's clothing shop downtown. Sonja says, "People don't ask me about my daughter converting anymore. It was strange at first, but now it has been 18 years." Lower: Sandra and others help make Alnor Senter part of Tromsø's civic landscape at one of the city's downtown festivals.**

and lingonberries, or that of the political party offering free waffles, or the French lady selling sweaters of local wool, or the Sami representative in bright traditional garb who has set up a tent in the town square.

Working at Alnor's booth, Hakima enjoys talking to any passers-by. "Somehow God sent me here, and I'm confident in who I am here," she says.

Most everyone is too familiar with the beauty of Tromsø's natural setting to give it full attention—seagulls squawking, ships sliding into the harbor, the fjord glistening and the mountains that never lose their snow.

Above the mountains, other birds are flying south ahead of the dark winter; some of them will cross the Mediterranean. "When I ask my mother to visit me here in Tromsø," says an Algerian engineer, "she answers that 'birds fly to the trees, not the other way around.'" Like so many others in this city, he knows all about flying far away from your home to build a nest in a different land. 🌐

from Stockholm and originally from Iraq, leads them in prayer. The kids, happy to be out of school, as Norwegian law permits, run around the hockey nets.

Marit Dagsvik shushes them from the side, while holding the baby of one of the women praying.

Marit's warm chattiness seems to fit the Norwegian stereotype that the high north is the friendliest part of the country. This holiday morning, she was one of the first to arrive at Tromsøhallen. Her husband is from Somalia, she says, and they have two children whom they have agreed to raise Muslim. Before the congregants arrived, she set up the *kakebord*, a Norwegian dessert table used for celebrations. She has brought waffles and homemade strawberry jam; others have brought pies, cookies and *grønn genser* ("green sweater cake"), a specialty of the area named for its green marzipan topping.

"A lot of my friends don't know any Muslims personally," Marit says. "They think they need a good excuse to go to the mosque to meet people. So I think I am lucky to be able to step into both worlds."

Sandra sees it all as just one world in her hometown. These days, she focuses much on the next generation. "We need to have alternative activities for them. We can't just tell them certain things are *haram* (forbidden) without letting them feel fulfilled and giving them alternatives."



**Alia Yunis** ([www.aliayunis.com](http://www.aliayunis.com)) is a writer and filmmaker based in Abu Dhabi. She is the author of the critically acclaimed novel *The Night Counter* (Random House, 2010).



Photographer and writer **Tor Eigeland** ([www.toreigeland.com](http://www.toreigeland.com)) has covered assignments around the world for *Saudi Aramco World* and other publications, and has contributed to 10 National Geographic Society book projects.



**Related articles** from past issues can be found on our Web site, [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). Click on "indexes," then on the cover of the issues indicated below.

Ramadan in Cairo: J/F 02

RamadanUSA: J/F 02

Ramadan in Holland: M/A 90



[www.alnor.no](http://www.alnor.no)



WRITTEN AND PHOTOGRAPHED BY MARJORIE RANSOM

All my adult life I have collected silver jewelry from the Middle East. It began in 1960, when I received a grant to spend the summer studying Arabic in Lebanon. From there I visited Damascus, and I went home with my first bracelet. Later, throughout a 30-year diplomatic career, I collected jewelry. At first it was just to wear, but as my husband, David, grew as interested in silver as I, we bought larger and more complex pieces. By 2000 we had accumulated a significant collection.

# The Enduring Craft of YEMENI SILVER



Silversmith Ali Muttahar al-Ma'amari, left, is among the new generation of silversmiths from al-Rujum, west of Sana'a. At right is his cousin, Walid al-Ma'amari.

Through forays to jewelry markets around the Mediterranean and throughout the Arabian Peninsula, I learned that the most intricate jewelry came from Yemen. I found good Yemeni pieces in Jiddah, Damascus, Cairo and, on rare occasions, in the US. As time went on, I focused my attention more and more on Yemeni silver, not only because of its unsurpassed craftsmanship, but also because, by the late 1990's, it looked as if this traditional craft might disappear.

This threat had its roots in the decline of both demand and supply. Gold had risen in value over the previous few decades, reducing the relative value of silver, and silver thus became too inexpensive to serve as a depository of family wealth, as it had for centuries. At the same time, even the idea of keeping wealth in such a form became old-fashioned as banks became more accessible. For those families who did retain some wealth in the form of jewelry, gold became the metal of choice, even if a family could afford only a piece or two. Lifestyles changed, too: Instead of receiving jewelry as wedding gifts, as was traditional, new couples often preferred appliances. And of the silversmiths, many of the most skilled had been Jews, and in the late

1940's and early 1950's, most of Yemen's Jewish population emigrated to Israel.

In the early 1990's, I began to lecture on Yemeni and Middle Eastern jewelry, and I arranged the exhibition "Silver Speaks: Traditional Jewelry of the Middle East" in 2004. After I addressed the Freer Gallery Seminar on Yemeni Culture in 2002, Abdul Karim al-Iryani, then a special advisor to the president of Yemen, encouraged me to research and write more on Yemeni jewelry. A year and a half later, thanks to research support from the American Institute for Yemeni Studies, I was on my way back to Yemen, and between 2005 and 2007, I spent about a year there.

That is when, to my delight, I found that a new, young generation of silversmiths had grown up. Despite the difficulties of low demand and, most recently, political turmoil, they are keeping the traditional craft of finely worked silver alive. I sought out and spoke with about 40 of them.

In particular, a group or "school" of young men from al-Rujum, north of Sana'a, had been receiving encouragement from their fathers to learn silversmithing. Silver was cheap, it seemed, so they could melt down their mistakes and resell the bullion without major losses. To a person, these young men are proud to be continuing one of their country's finest artisanal traditions—and willing to face a new, uniquely 21st-century, challenge: Sana'a markets are full of Chinese tin-and-plastic copies of Yemeni traditional jewelry.

There is, however, a market for their best work in Saudi Arabia. A fine hand-tooled sword of 85 percent silver might bring as much as \$2500; a new woman's belt done in filigree might bring \$1000. (A good antique one might fetch up to \$3000.) A few families in Sana'a have purchased complete new sets of wedding jewelry in the traditional style. Tourists, when they come, buy the new work, too. But most of the silversmiths agree that, if these crafts are to thrive again, there will have to be more customers.





In Sana'a, the first silversmith I met was Ali Muttahar al-Ma'amari. I interviewed him as he worked in a tiny workshop in the back of his father's silver store. He was 22 and had just become a father himself. I sat in his cramped space, sipping tea and talking, and over the course of a day and a half, I videotaped him at work. (See [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com).) He showed me how he does *shadhraat* (granulation), the technique of cutting fine pieces of silver wire and melting them over a steady flame until surface tension rolls them into perfectly round balls. He then solders these tiny spheres into small *zuhras*, or floral clusters, such as appear on the central medallion of the necklace below. This design is called *badeehi*, in honor of a family of Jewish silversmiths by that name who specialized in *shadhraat*.







As I met silver dealers and saw new jewelry, I heard that a number of the young artisans hailed from the same part of north Yemen: al-Rujum, in the mountains of Mahwit province, west of

Sana'a. Most of the al-Rujum silversmiths, I found, learned their craft from one master: Ibrahim al-Mahdi. Now in his late 70's, al-Mahdi trained with Yemeni Jewish silversmiths. When I met him in 2005, he was fashioning swords and daggers for men. He had only one example of his work for women and he was willing to part with it. This upper-arm bracelet, called *damlaj*, was made for the women of the coffee-producing families of the mountains of Milhem in Mahwit province. It is one of my most treasured pieces.



When I met Nasir Nasir, a student of Ibrahim al-Mahdi, he was fashioning the "hut" ("whale") for the motif known as "hut wa zahr" ("whale and flower"), which was used extensively in northern Yemen for at least 200 years. It appears on bracelets and belts for women, like those at left, as well as on handles for men's daggers and knives. He also made the light, intricate bracelets below.

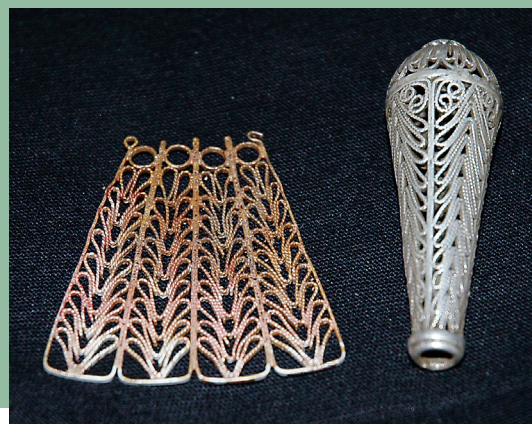






Nasir's brother  
Mohammed

was also a student of al-Mahdi. I found Mohammed in Sana'a, too, working in a tiny space in the *suq al-milh*, or silver market. He showed me how he prepared beads and *mazaamir*, mace ends, for a necklace. He worked quickly and quietly in this workspace tucked away from the hustle and bustle of the bazaar. He outlined a shape in wire, and then filled the inside with the twisted wire filigree to form a leaf pattern for the end pieces. This work is called *bowsani*—again named after the Jewish family that perfected this filigree style. When I interviewed him in 2006, he was 22, as highly skilled as he was generous and gentle. Tragically, he died two years later. This necklace, left, will always carry my memory of him.



Abdullah al-Jalal has a workshop in his house in the suburbs of Sana'a. Before I could interview him, he insisted that I share a meal with him and his family. After this delicious repast, he showed me a bracelet he had made using the "hut wa zahr" motif. He braced it on the *masdaq*, or doming block, that silversmiths use for shaping beads. To do the intricate filigree that you see on the partly finished belt below, he uses a traditional *majarra*, or drawplate, to reduce silver wire to the fine size required.







South of Sana'a in Taiz, Yemen's largest city, I found the second-largest silver-making center largely dominated by offspring of Yemen's largest silver-making family today—the Arifis. Abdullah Ismail al-Arifi was 31 when I interviewed him, and he had learned to work silver from his grandfather. In fact, he said, his ancestors back “seven to eight generations at least” had all worked in silver. He developed a business using the *sham'i*, or lost-wax, method, with which he created replicas of traditional silver jewelry, and he was training four or five workers. He made these beads, which replicate the traditional *takhrim*, or cutout, style (open-work) of the coastal city of Zaidiyya, where there is today only one full-time silversmith remaining. Although silver made using the lost-wax method has less value than hand-tooled pieces, doing lost-wax work well nevertheless requires much skill, and when I first saw these beads, I could not tell they had been produced that way.



Abdul-Fatah Ismail al-Arifi, a younger brother of Abdullah, began working in silver when he was 16, and he was 24 when I visited him. He added that other al-Arifis work gold in Jiddah, and that his own immediate family had come to Taiz generations ago from the village of Bani Arifi in Wasab Safil, a remote mountainous area southwest of Sana'a. Each of the two lost-wax *jambiya* scabbards shown here took a week to complete, he said. He takes pride in his lost-wax skill: He had me compare the fine old *mahfaza*—a small coin holder mounted on the belt of a *jambiya*—at top in the picture at left, with his lost-wax replica, below.







I have a special fondness for the simplicity and clarity of designs from Zaidiyya near the Red Sea. I had found three antique pieces—the center crescent and the two darker rectangles at left—and I wanted to have new pieces made to complete what would then be a restored original. Although I had doubts I could find a silversmith who could match the antique work, Mahboob Ghalib Amri of Taiz did just that. Unlike the other young silversmiths in that city, he is the first in his family to work this metal. He was 30 in 2006 and had been working silver for 10 years. He prepared the missing pieces, and now this lovely “Zaidi” necklace is symbolic of Yemeni silversmithing itself—part rich past, part young and promising present, yet all of one piece, enduring.



Collector, curator and writer **Marjorie Ransom** first showed her collection of traditional Middle Eastern silver jewelry in 2003 in Washington, D.C. It has since appeared in solo and group shows in New York, San Diego and at the Arab American Museum in Dearborn, Michigan. A book, *Silver Treasures from the Land of Sheba*, has been accepted by the American University in Cairo Press.



Scan this QR code with your smartphone, or go to [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com), to see a video of a Yemeni silversmith at work.



**Related articles** from past issues can be found on our Web site, [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). Click on “indexes,” then on the cover of the issues indicated below.

“Silver Speaks” exhibit: N/D 04

Traditional architecture in Yemen: J/F 06



[www.ransomsilverspeaks.com](http://www.ransomsilverspeaks.com)





# *The Lady's Cairo*

WRITTEN BY EDWARD FOX • PHOTOGRAPHED BY DANA SMILLIE





Appearing as if she might either sing or weep yet again, this statue of Umm Kulthum in Zamalek, in central Cairo, hints at the emotion and operatic posture for which she became a legend. Now silent amid the honking swirl of traffic at her feet, it is perhaps fitting that her back is turned to the tower on the site of her former home, and her face and hands open toward Egypt's most enduring symbol: the Nile.

The visitor to Cairo is never far from the sound of Umm Kulthum, the great Egyptian singer. Although she died in 1975, her voice is still everywhere. It's the plaintive, lamenting, yearning voice you hear coming from the cassette players of taxis, from countertop radios, from the doorways of shops and cafés. Her music is as much a part of the Cairo streetscape as the warm, exhaust-laden air and the ubiquitous desert dust that seems to turn everything in the city an ancient shade of soft, stony brown.

For the non-Arab, the music itself has what at first sounds like an impenetrable strangeness. Nothing about it seems familiar to

the western ear. The scales are different; you can't distinguish major from minor notes; there is no obvious rhythm; it's hard to tell if you're hearing the beginning, the middle or the end of a song. Yet it's also obvious that this is highly elaborate, highly formal music, instrumentally virtuosic and precise, and conveying powerfully intense emotion.

Edward Said, the Palestinian-American intellectual whose early musical education was based on the western classics, reacted with dismay when, as a boy, he attended a concert by Umm Kulthum in Cairo in the 1940's. It was "a dreadful experience," he told a Dutch television interviewer in 2000. "The tone was mournful, melancholic. I did not understand the words.

"It did not begin until 10 o'clock at night. I was half asleep ... [in] this great crowded theater," Said went on. "There did not seem to be any order to it. The musicians would wander on stage, sit down and play a little bit, wander off, and then come back, and finally she would appear.... And her songs would go on for 40 to 45 minutes. And to me there was not the kind of form or shape [I was used to in western classical music]: It seemed to be all more or less the same."

Certainly the enduring power, meaning and mystique of Umm Kulthum's art do not translate easily from the Arabic. The western enthusiast of world music who, in pursuit of the exotic or the novel, might seek out recordings and performances of Balinese gamelan music, Indian ragas or African dance music will not instantly find what he or she is looking for in the vast catalogue of Umm Kulthum's recordings.

Her music's appeal seems distinctly Arab and even specifically Egyptian. Her life and work weave together an experience of Arab and Egyptian history and sensibility, and the music must be understood in Arab and Egyptian terms. Umm Kulthum herself, in her 50-year career, would not have considered for a moment trying to seek a non-Arab audience.

This doesn't mean that we can't appreciate her music or learn to love it. Said's view changed as his studies of western classical music and Arab culture proceeded, and he came to appreciate qualities that Umm Kulthum's work embodies: variation, digression and elaboration rather than logical

structure; timelessness; an atmosphere of contemplation; and potentially infinite ornamentation.

Said doesn't say where he heard Umm Kulthum perform that memorable evening. It could have been in one of several theaters in downtown Cairo. But he certainly heard her at a good time. By the 1940's, Umm Kulthum was well established as the dominant figure in Egyptian popular music. At that time, with the country straining under the pressures of continuing British political dominance, an unpopular monarchy and economic hardship, she articulated the feelings of the ordinary Egyptian in a way that no other artist



did. And this was only the midpoint of her career. By the time Said heard her, she had already been performing for a quarter of a century, and her career still had another quarter-century to run.

The singer's evolution from the country girl, born Umm Kulthum Fatima Ibrahim al-Baltaji, to the national icon known only by her first name took place almost entirely in Cairo itself, and one can easily make a walking tour of sites in the city's downtown where important moments of her life took place. To do so now is very much an exercise in nostalgia. Although many sites can be located, many others no longer exist or have been transformed beyond recognition in the city's endless process of change.

opening of the Suez Canal. Nowadays the Ezbekiya Gardens, in the heart of downtown Cairo, resemble a vast building site, with little greenery remaining, overlooked by an elevated highway and surrounded by tall buildings—but in the 1920's the gardens contained a number of small theaters and music halls.

In such places, accompanied by her small ensemble of family members, Umm Kulthum sang a mixed repertoire of religious and popular songs. In these often rowdy venues, her appearance attracted as much attention as her voice. While other popular singers of the day favored sequins, fancy head-dresses, shape-enhancing gowns and exposed flesh, Umm Kulthum dressed like a man, in a



The original Umm Kulthum was, according to tradition, the daughter of the Prophet Muhammad and his first wife, Khadija, and later the wife of the Caliph 'Uthman. The name itself means "the one with (literally, the mother of) the round face."

Born in 1904 (probably) in a village in the Nile Delta, Umm Kulthum began her career singing religious songs at social gatherings in the Delta countryside, accompanied by her father, who was an imam, and other relatives. Before she found Cairo, Cairo found her: Even as a teenager, her reputation was such that she was soon asked to sing at the homes of prominent Cairo families and in Cairo theaters. In 1923, to advance her career, she finally made the move from the country to the city.

The center of the city's entertainment business at the time of Umm Kulthum's arrival was the area in and around the Ezbekiya Gardens, originally a European-style landscaped park built by Khedive Ismail in the 1870's as part of the celebrations for the

**An enormous bust of Umm Kulthum decorates a coffee shop in downtown Cairo where her music, and much animated conversation, fill the air.**

bulky black coat with a headscarf held in place by a cord, attire that gave her a distinctly

rustic air. As the daughter of a cleric, she was careful to preserve her physical modesty, and she maintained this sense of propriety for the rest of her life. It formed her signature look: She was never seen wearing anything but a long-sleeved dress that reached her feet, with a high neckline.

The newspaper *Al-Ahram* published notices that appeared around Cairo advertising Umm Kulthum's performances during this period. The Ezbekiya Gardens Theater announced an evening's "open-air musical performance" featuring "the famous singer, the Lady of Song, Umm Kulthum. Delight in song beneath the stars. Women's private section available. General entrance 10 piastres."

In an instance of imitation being the sincerest form of flattery,



some unidentified rival singers—now lost to history—took her name at one point, compelling Umm Kulthum herself to issue a notice clarifying the matter: “I alone am the original Umm Kulthum and I am Umm Kulthum Ibrahim al-Baltaji. As for the others, they are false *ummahat* [that is, ‘Umms’] of Kulthum, whom Kulthum disowns, denying their relationship to singing.”

The country girl who arrived in Cairo unable to use a knife and fork soon began an intensive program of education, self-improvement and self-invention. She studied classical Arabic poetry and music with masters of these arts. Socially, her ambition took her into the salons of wealthy and cultured Cairo families, and she

*Not only did Umm Kulthum establish herself as the country's preeminent singer, she was also the best paid, negotiating all deals herself in a steely and imperious style.*



Above: **Umm Kulthum** gave her name to venues like the **Umm Kulthum Alhambra Theater** in Jaffa, Palestine, photographed in 1937. Left: It was in the 1930's that Umm Kulthum began to give her radio concerts from Cairo's old Opera House, which burned down in 1971. The site is now a parking garage on Opera Square.



adopted the manners and style of dress of the friends she made among cosmopolitan Cairene women. Three years after arriving in Cairo, she took the radical step of dropping the ensemble of family members—including her father and her brothers—who accompanied her in performance. By this time, she had surpassed them

musically, and they were a brake on her career. As one critic noted, “As for her presentation on stage, the weakness there is our gentlemen ‘the shaykhs’ who surround her, sometimes sitting like stone idols, sometimes stirring about. What is the use of their sitting around her so?”

She replaced them with a classical Arab ensemble that included some of the best musicians in Cairo. Her first concerts with this new group, at the Dar al-Tamthal al-‘Arabi (“The Arab Theater”) in the Ezbekiya area in September 1926, were an outstanding success. “Her voice has a perfect sound,” a critic wrote, “especially after she advanced these new developments this season.” Her talent was

accompanied by a keen business sense. Not only did she establish herself as the country's preeminent singer, but she was also the best paid, negotiating all deals herself in a steely and imperious style.

One of the sites in Cairo most closely associated with Umm Kulthum's reign over Egyptian popular music was the old Opera House, a stone's throw from Ezbekiya Gardens. While Opera Square remains a Cairo landmark, dominated by an equestrian statue of the 19th-century general Ibrahim Pasha (his arm upraised, pointing the way to victory), the Opera House itself burned down in 1971 and was replaced by a large, drab parking garage. The Opera House, another of Khedive Ismail's *grands projets*, was built 1869 in splendid French style—mostly of wood, unfortunately—and hosted the premiere of Verdi's opera “Rigoletto.” In the 1930's, it was the setting for Umm Kulthum's earliest radio concerts. These concerts, which were soon regularly broadcast on the first Thursday of every month, became a central feature of social and cultural life across the Arab world and are perhaps the most famous aspect of Umm Kulthum's legacy.

According to legend, the Israeli military command timed its first air attack on Egyptian forces at the start of the 1967 Six Day War for the night of the Umm Kulthum radio concert, when it could be sure that the entire Egyptian population would be glued to their radio sets and distracted from military matters. The legend is false: In fact, the first attack took place Monday night, June 5, 1967; the second, definitive attack came the following day.



The element of truth in the story is that the Thursday night radio concerts did indeed clear the streets, and people did indeed gather around their radios to listen. Unlike today, when listening to the radio is mostly a solitary activity, listeners to the Umm Kulthum radio concerts formed an extension of the audience in the concert hall. People listened to the broadcasts in cafés and in groups at home, and ate and drank during the long intervals between songs. In his novel *Miramar*, Naguib Mahfouz describes a group of residents in a Cairo pension gathering together for this collective experience:

The evening of Umm Kulthum's concert is a magnificent occasion, even at the Pension Miramar; we drink, laugh and talk of many things, including politics. But even strong drink cannot get the better of fear. [The context is the increasing harshness of the Nasser revolution in Egypt.] ... The singing starts and they listen greedily to the wireless. I grow tense. As usual, sure, I can follow a verse or two, but I quickly get bored and distracted. There they sit, wrapped up in the music, and all I feel is terrible isolation. I'm astonished that Madame is as fond of Umm Kulthum as any of them. 'I've listened to her for so many years,' she explains when she observes my surprise.

Tolba Marzuq is listening intently. 'Thank God they didn't confiscate my ears, too,' he whispers to me.

Umm Kulthum performed these monthly radio concerts for 36 years. The last one was in 1972. By that time, her career had assumed a political dimension. She was chairwoman of the Listeners' Committee of Egyptian Radio, a position that gave her enormous influence over the music and musicians chosen for broadcast. She also became head of the national Musicians' Union. In the aftermath of the Arab defeat in the 1967 Six Day War, she made a tour of Arab cities to raise money for the depleted Egyptian treasury, traveling on a diplomatic passport, which gave her arrival in a city the character of a state visit. Her friendship with President Gamal Nasser was well publicized: He would invite her to his home to break the fast on the first night of Ramadan, and he showered her with decorations and awards.

By the late 1960's, her health was declining. Her marathon performances—which at their peak had typically lasted five or six hours, starting at about 10 p.m. and finishing around three a.m.—became shorter. She gave her last concert in December 1972 at the Qasr al-Nil cinema in downtown Cairo, a short distance from the famous Groppi café. The occasion was a poignant and dramatic

ending to her long career. As commentator and longtime fan Maurice Guindi wrote in *Al-Ahram Weekly* in 2000:

She started off with Abdel-Wahab's "Laylat Hubb" ("A Night of Love"), giving a sparkling two-hour rendition with numerous variations of her own that left the audience dazed. Her second song, a religious one about the holy sites, required a high pitch at many points. At one of



The Umm Kulthum Museum displays a photo collage, above, highlighting The Lady's life and career, as well as the microphone, left, that she used for her first radio performance.

those points, and without advance warning, her voice cracked, sounding a discordant note. She froze and the orchestra stopped playing. There was dead silence in the hall for a few seconds followed by frenzied applause from the 1800-strong audience. The outburst seemed to reflect a mix of love, encouragement, compassion and maybe pity. I was dumbfounded, telling myself that the slip was just the result of exhaustion after the strenuous effort made in the first song and that the lady would bounce back.

During her final illness, crowds gathered outside her elegant house on Abu al-Fada Street on the northern tip of Zamalek Island. Regular reports on the state of her health were issued by newspapers and radio stations throughout the Arab world. She died in a hospital on February 3, 1975.

Her funeral was an extraordinary outpouring of popular feeling. An orderly procession led by a military band crumbled as the throng of mourners—estimated in the millions—seized possession of her casket and bore it through the streets of Cairo to the Sayyid Husayn Mosque, named after the grandson of the Prophet Muhammad. The symbolism in this was powerful: The initial funeral prayers took place in the 'Umar Makram Mosque near



Tahrir Square, a prestigious downtown mosque where the funerals of famous people traditionally are held, but the mourners carried the casket nearly five kilometers (3 mi) away to a place where further, unscheduled prayers were recited. It was as if the ordinary people of Egypt, among whom Umm Kulthum was born, were reclaiming one of their own.

Her body was entombed in the Bassatine Cemetery, in the southernmost part of the City of the Dead, south of the Citadel. Visiting it is a pleasant excursion. Once you are through the cemetery gate, an attendant will guide you along a narrow avenue to the tomb and unlock the heavy steel doors, on receipt of payment. Inside, the tomb looks like a modest but dignified sitting room, with upright chairs, tables, arrangements of plastic flowers and framed calligraphic inscriptions on the cool white walls. “The Lady” (al-Sitt), as Umm Kulthum was called, lies under a stone slab in the floor.

New monuments to Umm Kulthum have risen in Cairo in recent years. Her house in Zamalek was demolished with unseemly haste not long after her death, to be replaced by a hotel and apartment building named after her. In acknowledgment that this was where she lived, a large statue of her stands nearby, a rare example in the Middle East of a statue of a woman. But perhaps her best memorial is the Umm Kulthum Museum, located at the southern tip of Roda Island, in a building that formed part of the Ottoman Manasterly Palace. Here one can see relics of The Lady herself: jewel-encrusted sunglasses and dresses, medals she received from governments and organizations across the Arab

world and memorabilia from her performing and recording career.

The old Opera House has been replaced by a new Opera House, in Zamalek, across the Qasr al-Nil bridge. Here an annual Umm Kulthum memorial concert is held in which young performers recreate her familiar songs with extraordinary power, feeling and virtuosity. It is an event that shows that Umm Kulthum’s music is still a living part of the culture of Egypt.

I have an Egyptian neighbor in London. When I told him I was writing about Umm Kulthum, he stopped dead in the middle of the street, as if the ghost of the singer had suddenly appeared before him. “I met her, you know,” he said, astonished to be summoning up a long-dormant yet still vivid memory. “She came to a party at my parents’ house. I was very young at the time. I remember this very tall woman, standing all alone, wearing dark glasses. It was Umm Kulthum! But no one dared to talk to her. She was too famous! She was a legend, and we were terrified of her!” he said. ☹

Left and below: **Two of The Lady’s signature possessions—her scarf and her diamond-encrusted glasses—are on display near the museum’s entrance.**



*Young performers recreate her familiar songs at the annual Umm Kulthum memorial concert ... showing that her music is still a living part of the culture of Egypt.*



**Edward Fox** ([www.edwardfox.co.uk](http://www.edwardfox.co.uk)) is the author of *Palestine Twilight: The Murder of Albert Glock* and *Archaeology of the Holy Land*, among other books. He lives in London.



**Dana Smillie** is a freelance photographer and video journalist living in Cairo.



**Related articles** from past issues can be found on our Web site, [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). Click on “indexes,” then on the cover of the issues



Scan this QR code with your smartphone, or go to [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com), for a video tour of the Umm Kulthum Museum.





## 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

## Curriculum Alignments

To see alignments with us national standards for all articles in this issue, click "Curriculum Alignments" at [www.saudiaramco-world.com](http://www.saudiaramco-world.com).

## Professional Development Workshops

The Middle East Policy Council, an independent, non-partisan educational organization, offers free Professional Development Workshops to help K-12 educators understand the geographical, political and human complexities of the region and to provide valuable teaching resources. MEPC will design a workshop to give your school, organization or conference innovative tools and strategies for teaching about the Middle East and Islam. For information, e-mail Barbara Petzen at [bpetzen@mepc.org](mailto:bpetzen@mepc.org) with your name, school or organization, phone number, and subject and grade taught. MEPC has also developed a companion Web site, [TeachMiddleEast.org](http://TeachMiddleEast.org), with background essays and lesson plans.

**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.

## CLASS ACTIVITIES

Cities are population centers—areas where a lot of people live. They are usually centers of economic and cultural activities, places where people of diverse backgrounds live, work and play. This issue's Classroom Guide focuses on two aspects of cities: their physical space and their residents—both newcomers and natives. In the activities that follow, students have a chance to evaluate the interactions between urban dwellers and the cities they live in.

### Theme: Cities

Start your work on this theme by finding several definitions of *city*. Read them and list the characteristics of cities that you think are most important in identifying them. Then write a one-paragraph definition of *city*. Your definition can include a dictionary definition, but it should be more complete. It might include, for example, descriptions of a city, activities that happen there, people who live there, what the bustle of life is like there. In other words, write a paragraph that lets a reader know more about what a city is than he or she can find out from a dictionary.

### The Physical Space

**Location:** Geographers have two ways to describe the location of a place: "absolute" location and "relative" location. Absolute location refers to a place's latitude and longitude. Relative location refers to where a place is in relation to other places, as in "My house is the third one on the left once you cross High Street." With a small group, look at maps that show the location of these five cities: Cairo, Chicago, Paris, Riyadh and Tromsø. With your group, find the absolute location of each city. Discuss what, if anything, surprises you about what you've found. Why does it surprise you? Then consider each of the cities' relative locations. What physical features is it near? What human-made features, if any, connect it to other places? What, if anything, surprises you about its relative location? Why do you think the city formed and grew where it did? List characteristics of the cities' relative locations that all five cities have in common. What generalizations can you make about the physical location of cities?

**The Composition of a City:** Now that you've seen where some cities are located, switch your focus to consider what a city is like on the inside. Read "A Wadi Runs Through It." Look at Wadi Hanifah on a map of Riyadh. How would you describe its location relative to the rest of the city? With your group, use information from "A Wadi Runs Through It" to write the story of what happened to Wadi Hanifah before its recent

remake. Include an explanation of why it happened. For your story, think about the causes of the situation as they relate to your definition of *city*. Do you think cities, by their very existence, have to experience these kinds of problems? If so, why? If not, why not?

Now think about the big environmental engineering project that has taken place at Wadi Hanifah. Write a description of it that can follow your description of the problems that the project addressed. Include in your description how the wadi was improved and the purposes for which the area is now used.

How might these purposes be useful in other cities? To help you think about that question, consider one of the United States' oldest urban parks: Central Park in New York City. With your group, do some research about Central Park. What did park planners say about the purposes that the park would serve for city residents? Have those purposes been met? Which of these purposes is the revamped Wadi Hanifah serving? Are there some purposes of Central Park that Wadi Hanifah is not serving? If so, what are they, and why do you think they are not being served?

Pull together your work on Wadi Hanifah by creating a presentation with your group that answers the question: Has the Wadi Hanifah restoration project helped Riyadh? If so, how? If not, why not? You can make your presentation as a PowerPoint (including pictures), a poster, a Web page, or any other medium and format that work.

### Newcomers and Natives

As you know from defining *city*, one of the key features of cities is that they are population centers. Often in cities, some of the population is composed of immigrants—that is, people who have moved there from another country. In this part of the Classroom Guide, you're going to look at the immigrants and native-born people of Tromsø, Norway. (If you want to say it like a local, pronounce it "TRAHM-sue.")

Read "Ramadan in the Farthest North." Take a few minutes to imagine what it might be like to leave a place like Somalia to live in a place like Tromsø. Look at maps, climate data, visual images and any other information that you think will give you a general sense of the two places. Make a class list of similarities (surely there must be some) and differences between the two places that your quick exploration has uncovered. Share







ideas about experiences that you can imagine Somali immigrants to Tromsø having. Then broaden your discussion to immigration in general. Are you an immigrant? If so, share an experience you had soon after your arrival, if you feel comfortable doing so. If your parents, grandparents, friends or neighbors immigrated, share an experience they have told you about regarding their move to a new country.

Of course, when immigrants come to a new country, their lives change dramatically. At the same time, their presence can also change the cities where they settle. Hang two signs at the front of the classroom, one that says, “Ways that Immigrants Changed”; the other that says, “Ways that Tromsø Changed.” Give each student at least two sticky notes. On one sticky note, write a way that immigrants changed in order to live in Tromsø. On the other, write a way that Tromsø (including its people) changed as a result of immigration to the city. Put your sticky notes under the appropriate signs. (You can write more than one note for each category if you want to.)

Have someone read aloud the items under the first sign. After each item, decide whether it is an example of the immigrants changing radically (e.g., speaking a new language) or an example of adapting or mixing their native traditions with new ones (e.g., eating waffles and dates together). Separate the sticky notes (disposing of duplicates) into these two subcategories. Which subcategory has more items? What does this suggest about how

immigrants to Tromsø have retained and altered their way of life?

Have someone else read aloud the items under “Ways that Tromsø Changed.” How has Tromsø changed as a result of having newcomers settle in the city, and how well

do you think the native people of Tromsø adapted to the changes? Overall, would you say that Tromsø is or is not a hospitable place for immigrants? Why do you think so?

Think back to the immigrant experiences you discussed earlier. In those instances, how much did the immigrants change? How much did their new communities change? Think, too, about experiences in your current community that involve immigrants, whether or not you yourself have immigrated to the area. How have immigrants changed your community? How has your community changed as a result of immigration? Would you say your community is or is not a hospitable place for immigrants? Why?

#### Putting It Together: Umm Kulthum

So far you’ve defined *city*, studied the physical landscape of Riyadh, and learned about the newcomers and natives of Tromsø. For the final part of the Classroom Guide, consider the renowned singer Umm Kulthum. (Egyptians pronounce her name “oom kul-THOOM.”) Looking at her experiences, her city and her art will give you a chance to put together the themes you’ve explored so far.

Read “The Lady’s Cairo,” which tells the story of Umm Kulthum. Umm Kulthum was born in the countryside, but moved to the city. (That made her a migrant, but not an immigrant.) According to the article, Umm Kulthum changed dramatically when she got to Cairo. Make a list of the ways she changed. Think about Umm Kulthum’s experiences in the same way you evaluated the experiences of Tromsø’s immigrants. How much did she change? How much did she adapt from her earlier way of life? Then, how much did Cairo change because of her presence? How was her experience, as an Egyptian moving within Egypt, similar to, and different from, the experiences you have read about the immigrants to Tromsø? Would you rather move within your native country, or move to a new country? What might affect your answer?

As you’ve seen, people’s lives can be deeply rooted in their cities. “The Lady’s Cairo” says that “one can easily make a walking tour of sites in the city’s downtown where important moments of her life took place.” On a map of Cairo, find and mark these places. Use the article and additional research to create the text for an Umm Kulthum walking tour of Cairo.

Or, if you prefer, make a walking tour of a city closer to home. Choose the city you live in, or the city you live nearest to, and identify someone who spent much of his or her life there. It might be someone famous, or it might be someone you know—a parent or grandparent. Research how that person’s life was connected to that city. On a map, mark the important places in that person’s life in the city. Then make an itinerary for a tour. Where would you start the tour? What would you tell people about that place and why it was important in that person’s life? Then draw the tour’s route on the map. For each stop, write an informative script of what you would tell people at that stop. Illustrate

your guide. You might put pictures on the map itself, or you might make a brochure that includes a map and a numbered itinerary with descriptions and visual images. Post the tour guides in the classroom and look at other students’ work. Then as a class, discuss this question: How important in a person’s life is the place where he or she lives? Use evidence from the tours to support your answer.





## Weaving Abstraction: *Kuba Textiles and the Woven*

*Art of Central Africa* showcases the artistic inventiveness and graphic power

of Kuba ceremonial dance skirts within

a wide-ranging survey of Kuba design. The textiles of the Kuba kingdom are among the most distinctive and spectacular works of African art. The abstract beauty of these raffia fiber skirts, baskets, prestige panels and other objects captivated the European avant-garde in the early 20th century, influencing modernism, fashion, fabric design and the decorative arts. Emerging in the early 17th century, the Kuba kingdom grew into a powerful and wealthy confederation of 18 different ethnic groups located in what is now the Democratic Republic of Congo. More than 140 exceptional 19th- and early 20th-century objects are on view, including ceremonial skirts, "velvet" tribute cloths, headdresses and basketry. Textile Museum, Washington, D.C., through February 12.

**This woman's ceremonial overskirt (*ntshakabwiin*) was woven in the early 20th century by Bushong artisans in what is now the Democratic Republic of Congo.**



### Current **January**

**Dream and Reality:** *Modern and Contemporary Women Artists from Turkey* is centered on the position of women artists in modern and contemporary art, and offers a new, alternative perspective on the country's sociocultural history. The exhibits range from the mid-19th century to our day and incorporate many different media, from painting to video; there are works of close to 80 artists, including pioneering female artists about whose lives and work we know little and whose names are almost forgotten. Also included are rediscovered moderns and women artists who, for the last four decades, have been shaping the contemporary art scene with their intellectual attitude and practical actions. **Istanbul** Museum of Modern Art, through January 22.

**Uncanny Encounters** features recent photographic works by six younger women artists from Turkey—Silva Bingaz, Banu Cennetoğlu, Çınar Eslek, Zeren Göktan, Zeynep Kayan and Melisa Önel—who deal with the philosophical, socio-cultural, individual and artistic aspects of uncanny encounters through their visual narratives. "Uncanny" (*unheimlich*) is a concept used in art and philosophy to describe the unsettling feeling evoked by something that is strange and foreign, yet astonishingly close and familiar at the same time. Certain photographs present a subject, object or form that can be uncanny, and the photographer's own approach may render the visual outcome uncanny. **Istanbul** Museum of Modern Art, through January 22.

**Mysticism:** *Yearning for the Absolute* uses specific examples to illuminate the various manifestations of mysticism in Europe, Persia, India and East Asia. Museum Rietberg, **Zurich**, through January 15.

**Genghis Khan:** *The Exhibition* tells the story of the Mongol warlord who conquered half the known world. Under his rule, the empire grew to be the size of Africa—four times the size of the Roman Empire at its largest. But Genghis is also revered as an innovative leader and statesman who brought unity, stability and religious tolerance to most of Asia and parts of Europe. Highlights of the exhibition include jewelry, ornaments and musical instruments, weapons such as battle axes, scimitars, lances and long- and cross-bows, and such other military essentials as steel stirrups and silk underwear.

**North Carolina** Museum of Natural Sciences, **Raleigh**, through January 16; Field Museum, **Chicago**, February 24 through September 3.

**In the Kingdom of Alexander the Great:** *Ancient Macedonia* retraces the history of Alexander's homeland from the 15th century BCE to the Roman period, presenting more than 1000 artifacts from museums in northern Greece and from French archaeological digs, particularly the Portal of the Enchanted Ones, a masterpiece of Greco-Roman sculpture. "People know that Alexander was Greek, but they don't know that he was also

Macedonian, or that Macedonia is in Greece," says the Louvre's director of Greek antiquities. "The exhibition presents an opportunity for visitors to rediscover Alexander in the light of his origins." Musée du Louvre, **Paris**, through January 16.

**Indian Highway** presents the multiform panorama of the contemporary Indian artistic scene. It exhibits 60 works—including four site-specific installations—by 30 artists, reflecting the economic, social and cultural developments of the past 20 years. Defining the highway as a connector of the migratory flows moving into Indian cities, the exhibition reflects technological development, the economic boom and the growing global centrality of the subcontinent in the world of art. MAXXI, **Rome**, through January 29.

**Heroic Africans:** *Legendary Leaders, Iconic Sculptures* challenges conventional perceptions of African art. Bringing together more than 100 masterpieces drawn from collections in six European countries and the United States, it considers eight landmark sculptural traditions from West and Central Africa created between the 12th and early 20th centuries in terms of the individual persons who lie at the origins of the representations. Using materials ranging from humble clay, ubiquitous wood and precious ivory to costly metal alloys, sculptors captured evocative, idealized and enduring likenesses of their individual patrons. Analysis of each of these works considers the historical circumstances and cultural values that inform them; the sculptures are among the only tangible surviving links to generations of leaders who shaped Africa's past before colonialism. Catalog. Metropolitan Museum of Art, **New York**, through January 29; Museum Rietberg, **Zurich**, February 26 through June 3.

**Emirati Expressions** showcases works by Emirati artists that revolve around the theme of national identity. The photographs on show, produced in workshops led by photographer Stephen Shore, capture moments, places, people, sounds and images that reflect the essence of Emirati expression. Manarat Al-Saadiyat, **Abu Dhabi**, through January 29.

**Abu Hamid al-Ghazali (1058–1111): Celebrating 900 Years** honors one of the most significant Islamic thinkers and authors. Al-Ghazali, born in Tus (modern-day Iran), was a prolific writer particularly on philosophy, theology and law; his influence extended to some of the great western philosophers and even to the present day. The exhibition includes manuscripts, rare books and lithographs, as well as work by al-Ghazali's critics and scholars who were influenced by him. McLennan Library, McGill University, **Montreal**, through January 31.

### Current **February**

**The Making of a Collection:** *Islamic Art at the Metropolitan* is a chronological study of some of the museum's major donors, illuminating the factors and motivations that inspired their collecting habits. The exhibition showcases the principal figures of the first decades of Islamic art collecting in America, a period when as much as half of the



museum's 12,000-object collection was established. From the last quarter of the 19th century to the early 1930's, objects from the Islamic world were introduced to the American market as exotic treasures and gradually gained public recognition. Europe's earlier interest in travel to the Middle East caught on in America as well, and at international expositions, Middle Eastern governments erected pavilions in which imported objects and parts of buildings were shown and, afterward, sold to Americans. Oriental art dealers also played a critical role as tastemakers for Islamic art, acting as intermediaries between governments, American collectors, and museums. Metropolitan Museum of Art, **New York**, through February 5.

**Vaults of Heaven:** *Visions of Byzantium* offers a glimpse into the complex and vivid world of the Byzantine Empire through large-scale contemporary photographs by Turkish photographer Ahmet Ertuğ. The images highlight culturally significant UNESCO heritage sites in present-day Turkey, with a focus on the Karanlık, Tokalı and Meremana churches in the dramatic Cappadocian region of central Anatolia. Pennsylvania Museum of Archaeology and Anthropology, **Philadelphia**, through February 12.

**Ingenious Innovations:** Islamic *Science Rediscovered* reveals 1000 years of discovery on three continents. From the eighth to the 18th century, Muslim scientists drew upon ideas from various cultures, from Greece to Egypt and India, to produce a fountain of ideas that watered the multicultural roots of modern science and technology, and whose influence is still visible today. Designed to unearth the scientific know-how of an Islamic Golden Age, the exhibition showcases the primary fields of Islamic scientific endeavor, including architecture, arts, astronomy, engineering, exploration, flight, mathematics, medicine, optics and water control. Tech Museum, **San Jose, California**, through February 29.

#### Current **March**

**Of Gods and Mortals:** *Traditional Art from India*. In India, art is an integral part of daily life. The importance of paintings, sculpture, textiles and other art forms comprises two basic categories, one related to religious practices and the other to the expression of prestige and social position. This new installation of works from the museum's collection features some 28 pieces, principally representing the 1800's to the present. Peabody Essex Museum, **Salem, Massachusetts**, through March 1.

**Central Nigeria Unmasked:** *Arts of the Benue River Valley* reviews the arts produced in the Benue River Valley, source of some of the most abstract, dramatic and inventive sculpture in sub-Saharan Africa. The exhibition includes more than 150 objects used in a range of ritual contexts, with genres as varied and complex as the region itself—figurative wood sculptures, masks, figurative ceramic vessels, and elaborate bronze and iron regalia—and explores the history of central Nigeria through the dynamic interrelationships of its peoples and their arts. National Museum of African Art, **Washington, D.C.**, through March 4.

**Zaha Hadid:** *Form in Motion* emphasizes the continuous nature of the Pritzker Architecture Prize-winning architect's work, reinventing the balance between objects and space. For this exhibition—the first in the us to feature her product designs—Hadid has created a sculptural environment for a selection of furniture, decorative art, jewelry and footwear she has designed in recent years. Sleekly curving sofas, tables and lounge chairs—made of materials ranging from wood, steel and aluminum to polyurethane—represent the new and unusual biomorphic forms the Iraqi-born British architect has introduced into the language of design. Among the highlights are a collection of crystal-encrusted necklaces and bracelets; spiraling, strappy shoes made for Lacoste and Melissa; and the three-wheeled Z-car 1, a prototype created of high-density foam that echoes her sculptural forms. Philadelphia Museum of Art, through March 25.

#### Current **April**

**Tutankhamun:** *The Golden King and the Great Pharaohs* features more than 100 artworks, most of which have never been shown in the United States before this tour. These spectacular treasures—more than half of which come from the tomb of King Tutankhamun—include the golden sandals found on the boy king's mummy; a gold coffinet that held his stomach; golden statues of the gods; and King Tut's rings, ear ornaments and gold collar. Also showcased are objects associated with the most important rulers of the 30 dynasties that reigned in Egypt over a 2000-year span. The exhibition explores the splendor of the pharaohs, their function in both the earthly and divine worlds, and what "kingship" meant to the Egyptian people. Among the highlights is the largest likeness of King Tut ever discovered: a three-meter (10') statue of the pharaoh found at the ruins of a funerary temple. Museum of Fine Arts **Houston**, through April 15; Pacific Science Center, **Seattle**, May 24 through January 6, 2013.

**Re-Cycle:** *Strategies for Architecture, City and Planet* is devoted to the architecture of the third millennium and its most innovative practitioners. On show are more than 80 works, including drawings, models and architectural, planning and landscape-design projects, placed in dialogue with the works of artists, designers and videomakers. MAXXI, **Rome**, through April 29.

**Ancient Egypt—Art and Magic:** *Treasures from the Fondation Gandur pour l'art* brings to life one of the world's greatest civilizations. The exhibition of 100 stellar works features mummy cases, tomb and temple reliefs, papyrus fragments, alabaster vessels and precious stones. The show spotlights the spiritual qualities of the works, as well as their technical mastery. Museum of Fine Arts, **St. Petersburg, Florida**, through April 29.

#### Current **May**

**From Medina to the Jordanian Border:** *Photographs by Ursula Schulz-Dornburg* presents landscape images from unpopulated parts of the Hijaz region of Saudi Arabia, depicting its barren landscapes, crossed by trails and unpaved roads that are the remains

of pilgrim and caravan routes, and by remnants of the Hijaz Railway, built by Germans and Ottomans in the first decade of the 20th century. The exhibition supplements **Roads of Arabia**, below. Pergamonmuseum, **Berlin**, through May 6.

**Cai Guo-Qiang:** *Saraab* includes more than 50 works by one of the most influential international contemporary artists in his first solo exhibition in the Middle East. The exhibition demonstrates the emotional breadth of Cai's work, from the intimate to the spectacular, and is inspired by the multi-layered history of the artist's hometown of Quanzhou, China. *Saraab* ("mirage") illuminates the long-standing but little-known relationship between China and the Arab world dating back to the ancient maritime Silk Roads. Featuring the artist's characteristic use of symbols and stories about local history and transnational movements, the exhibition explores the historic and contemporary iconography of the Arabian Gulf and its seafaring culture, as well as the Islamic history of Quanzhou. Works on view also address the ambiguity of Qatar and China's relationship, as well as Cai's own creative development. A millennial and symbolic journey, *Saraab* questions whether there is something illusory or unobtainable about the process of cultural, temporal and geographic translation. Since his youth, Cai had been curious about the traces of Islamic influence in his hometown, including the grand Ashab Mosque and cemeteries with countless Arabic-inscribed tombstones. Quanzhou was a significant maritime port on the ancient Silk Roads and a trade hub for silk, porcelain, tea and spices. The city also hosted some of the earliest Muslim missionaries, now buried in the city's Holy Mausoleum. *Saraab* offers Cai's perspective on the complex web of conceptual and material connections between China and the Arab world, of dynamics between historic localities marked as much by the passage of ideas and lived experience as by material trade. Mathaf: Arab Museum of Modern Art, **Doha, Qatar**, through May 26.

#### Current **June**

**Painting the Modern** in India features seven renowned painters who came of age during the height of the movement to free India from British rule. To move from the margins of an art world shaped by the colonial establishment, they organized path-breaking associations and pioneered new approaches to painting, repositioning their own art practices internationally and in relation to the 5000-year history of art in India. These artists created hybrid styles that are an essential component of the broad sweep of art in the 20th century. After independence in 1947, they took advantage of new opportunities in art centers around the world, especially Paris, London and New York; at the same time, they looked deeply into their own artistic heritage, learning from the first exhibition of Indian art in 1948 at Raj Bhavan in Delhi and taking inspiration from ancient sites. Peabody Essex Museum, **Salem, Massachusetts**, through June 1.

#### Current **July and later**

**Patriots & Peacemakers:** *Arab Americans in Service to Our Country*

tells true stories of heroism and self-sacrifice that affirm the important role Arab-Americans have played in the United States throughout its history, contributing greatly to society and fighting and dying in every us war since the Revolution. The exhibition highlights service in the armed forces, the diplomatic service and the Peace Corps. Personal narratives tell of Arab-American men and women of different national and religious backgrounds. Arab American National Museum, **Dearborn, Michigan**, through July 12.

**Gems of Rajput Painting** features the museum's superb collection of paintings made for the princes of Rajasthan and the Punjab hills (known as "Rajputs"). The kingdoms of these art-loving princes shared a common elite culture, though, by the early 1700's, each court had developed its own distinct painting style. The exhibition represents four of Rajput painting's central themes: heroic narratives, women and romance, Krishna and Hindu devotion, and courtly life. Museum of Fine Arts, **Boston**, through September 3.

**Pergamon:** *Panorama of the Ancient Metropolis* displays a wide variety of sculptures, mosaics, coins, ceramics and metal devices—along with a monumental 360° panorama—to present a vivid picture of life in the glittering ancient city, home of the famous Great Altar, with its depiction of the gods' battle against the giants. Most of the 450 exhibits, presented in their original architectural and functional contexts, have never been displayed before. Paintings, historical photographs and archival documents provide insight into the history of the discovery and research of the site. Pergamonmuseum, **Berlin**, through September 30.

**Jewels, Gems, and Treasures:** *Ancient to Modern* examines the various roles and meanings associated with a wide range of gem materials. While today in the West, diamond, pearl, emerald, sapphire and ruby are regarded as the most precious of materials, such other substances as feathers, claws, mica appliques, coral and rock crystal have commanded equal attention in other times and places, sometimes believed to guard their wearers from danger or malevolent forces. The 75 exhibits are drawn mostly from the museum's gem collection, including a dozen pieces acquired on archeological expeditions in Egypt and the Sudan in the early 1900's. Museum of Fine Arts, **Boston**, through November 25.

#### Coming **January**

**The Pirates of Carthage** is a play by Daniel Kelly that examines the recent uprising in Tunisia alongside the Mercenary War (264–241 BCE) in the ancient city of Carthage. The stories of uprising and rebellion in different eras are presented in parallel using Flaubert's novel *Salammbô* and the social networking platform Twitter; the play explores how we connect with the world around us. The Nellie Dean, **London**, January 16–18 and 23–25.

**Haji:** *Journey to the Heart of Islam* is the first major exhibition dedicated to the pilgrimage to Makkah, central to the Muslim faith. It examines the significance of the Hajj as one of the five



"pillars of Islam," exploring its importance for Muslims and looking at how this spiritual and physical journey has evolved through history. The exhibition examines three key strands: the pilgrim's journey, with an emphasis on the major routes used from Africa, Asia, Europe and the Middle East; the Hajj today, its associated rituals and what the experience means to the pilgrim; and the origins and importance of Makkah, the destination of the Hajj. Exhibits—which include material from collections in Saudi Arabia and from the Khalili Family Trust, as well as from major public and private collections in the UK and around the world—document the long and perilous journey associated with the pilgrimage, gifts offered to the sanctuary as acts of devotion and souvenirs that are brought back from the Hajj. They also include archaeological material, manuscripts, textiles, historic photographs and contemporary art. The Hajj has a deep emotional and spiritual significance for Muslims, and continues to inspire a wide range of personal, literary and artistic responses, many of which are explored throughout the exhibition, which also examines the social and political significance of the pilgrimage in relation to global trade and the transmission of ideas. British Museum, **London**, January 26 through April 15.

**Roads of Arabia:** *Archaeological Treasures From the Kingdom of Saudi Arabia.* The study of archaeological remains only really began in Saudi Arabia in the 1970's, yet brought—and is still bringing—a wealth of unsuspected treasures to light: temples, palaces adorned with frescoes, monumental sculpture, silver dishes and precious jewelry left in tombs. The exhibition, organized as a series of points along trade and pilgrimage routes, focuses on the region's rich history as a major center of commercial and cultural exchange, provides both chronological and geographical information about the discoveries made during recent excavations, and emphasizes the important role played by this region as a trading center during the past 6000 years. More than 300 works—sculptures, ceramics, jewelry, frescoes—are on display, dating from antiquity to the beginning of the modern period, the majority never before exhibited. Pergamon Museum, **Berlin**, January 26 through April 9.

**Karanis Revealed:** *Discovering the Past and Present of a Michigan*

*Excavation in Egypt* is a two-phase exhibition exploring the story of Karanis, a village southwest of Cairo that was inhabited during Egypt's Greco-Roman period and excavated by the University of Michigan in the 1920's and 1930's. Part I looks at daily life during the early centuries under the Ptolemaic Dynasty, and Part II follows changes that came with the Roman occupation of Egypt and, later, with Christianity. The displays include collections of Roman glass, tax rolls on papyrus and the leather breastplate of a Roman soldier. Kelsey Museum of Archaeology, **Ann Arbor, Michigan**: Part II, January 27 through May 6.

Coming **February**  
**Picturing the Past:** *Imaging and Imagining the Ancient Middle East.* The West's perception of the ancient Middle East has been formed by countless engravings, paintings, architectural reconstructions, facsimiles, models, photographs, and computer-aided reconstructions of monuments and sites. This collection of 40 examples of art depicting ancient sites examines how preconceptions, the perceived audience and artistic conventions have informed us about the ancient Middle East and how some of the more imaginary reconstructions have obscured our understanding of the past. Catalog. Oriental Institute, University of **Chicago**, February 6 through September 2.

**To Live Forever:** *Egyptian Treasures From the Brooklyn Museum* uses some 100 pieces of jewelry, statues, coffins and vessels dating from 3600 BCE to 400 CE 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, and 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. Joslyn Art Museum, **Omaha, Nebraska**, February 10 through June 3.

Coming **March**  
**The Emirates Airline Festival of Literature** is the Middle East's largest celebration of the written and spoken word, bringing people of all ages and backgrounds together with authors from across the world to promote education, debate and the love of reading and writing. The fourth edition of the "LitFest" features more than 100 authors from 25 countries in a program encompassing a variety of genres from literary fiction, politics, philosophy, biography, translation and Islamic art to

cooking, travel, sports, horror, crime, fantasy and science fiction. In addition, organizers have planned a large number of master-classes and workshops, a Fringe Festival and a kids' zone. Various venue, **Dubai, UAE**, March 6–10.

**Love and Devotion:** *From Persia and Beyond* features more than 60 rare Persian, Mughal Indian and Ottoman Turkish illustrated manuscripts from the 13th to the 18th century as well as related editions of European literature, travel books and maps. These works come from one of the richest periods in the history of the book and shed light on the artistic and literary culture of Persia, showcasing classic Persian tales and revealing the extent to which Persian language and culture influenced neighboring empires, as well as parallels in the work of European writers dating back to Shakespeare, Chaucer and Dante. Visitors will see works by such writers as Nizami, Jami, Firdausi, Rumi and Hafiz, as well as the *Rubaiyat of Omar Khayyam* and *The 1001 Nights*. A conference on "Persian Cultural Crossroads" will be held April 12–14. State Library of Victoria, **Melbourne, Australia**, March 9 through July 1; thereafter Bodleian Libraries, **Oxford, England**.

**Byzantium and Islam:** *Age of Transition.* The Eastern Mediterranean, from Syria across North Africa, comprised the wealthy southern provinces

## Farhad Ahrarnia:

*Canary in a Coal Mine* explores, in some of the works on view, the idea of being a person able to detect signs of trouble and danger, whose sensitivity makes him vulnerable. Others refer to the idea of being "stitched up," exploring the tensions that arise when contemporary Iranians attempt to reconcile their own sense of deep-rooted traditions with the force and consequences of modernity. Ahrarnia's works combine embroidery, digital photography, sewing needles and silver-plated shovels and dustpans. The pointed tips of his silver shovels, like the needles on his embroidered works, encourage viewers to dig into their own histories and discover the many layers of life beneath. Rose Issa Projects, **London**, January 18 through February 25.

Ahrarnia's "The Dig, Composition No. 8" (2011) is a full-sized shovel of silver-plated copper that refers to the pre-Islamic history of Persepolis, Mesopotamia and Pharaonic Egypt.



SAUDI ARAMCO WORLD  
(ISSN 1530-5821)  
is published bimonthly by  
Aramco Services Company  
9009 West Loop South,  
Houston, Texas 77096-1799, USA

Copyright © 2012 by Aramco  
Services Company. Volume 63,  
Number 1. Periodicals postage  
paid at Houston, Texas and  
at additional mailing offices.

POSTMASTER:  
Send address changes to  
Saudi Aramco World  
Box 2106  
Houston, Texas 77252-2106



of the Byzantine Empire at the start of the seventh century. By that century's end, the region was central to the emerging Islamic world. This exhibition displays the complex character of the region and its exceptional art and culture during the era of transition—from its role as part of the Byzantine state to its evolving position in the developing Islamic world. Images of authority, religion and especially commerce show the dialogue between established Byzantine and evolving Islamic styles and culture, and the exhibition also addresses iconoclasm as it emerged during that period among the Christian, Jewish, and Islamic communities of the region. Catalog. Metropolitan Museum of Art, **New York**, March 14 through July 8.

**Gifts of the Sultan:** *The Arts of Giving at the Islamic Courts* is a pan-Islamic exhibition spanning the eighth through 19th centuries and including more than 240 works of art from three continents: carpets, costumes and textiles, jewelry and other objects of precious metals, miniature paintings and other arts of the book, mosque furnishings and arms and armor. It also includes a small contemporary component: new work by three artists with roots in the Islamic world who have been commissioned to interpret the theme of the exhibition. *Gifts of the Sultan* introduces viewers to Islamic art and culture with objects of undisputed quality and appeal, viewed through the universal lens of gift giving—a practice that proliferated at the great Islamic courts not only for diplomatic and political purposes but also as expressions of piety, often associated with the construction or enhancement of religious monuments. Museum of Islamic Art, **Doha, Qatar**, March 18 through June 2.

**Revolution and Revolt:** *Understanding the Forms and Causes of Change* is the theme of the annual conference of the British Society for Middle Eastern Studies. The unprecedented uprisings in the Middle East over the past year have been compared with a wide variety of past revolts, from the French Revolution to the fall of the Berlin Wall. This conference focuses on the local and regional sources and forces that have fueled the uprisings. In addition to an emphasis on dynamics within and interpretations of the uprisings, presenters will reflect on what the events may mean for the study of the region. Middle East Centre at the **London School of Economics**, March 26–28.

**Coming April**  
**Looking at History through a Variety of Lenses** is the theme of the 19th EUROCLIO annual conference professional training and development course, sponsored by the European Association of History Educators and the History Teachers' Association of Turkey. ① [www.euroclio.eu](http://www.euroclio.eu). Hotel Kervansaray Lara, **Antalya, Turkey**, April 1–7.

**The Dawn of Egyptian Art** brings together some 175 objects gathered from the Metropolitan and 12 other museums to illustrate the origins and early development of ancient Egyptian art. During the Predynastic and Early Dynastic Periods (ca. 4000–2650 BCE), people living in the Nile Valley began recording their beliefs in paintings, sculptures, and reliefs made for their shrines and tombs. These works of

art capture the evolving world-view of these early Egyptians. Images of people, animals, and landscapes, some of which give rise to hieroglyphs, include forms and iconography that remained in use throughout the art of Pharaonic Egypt. Catalog. Metropolitan Museum of Art, **New York**, April 10 through August 5.

**Coming June**  
**Paradise Imagined:** *The Garden in the Islamic and Christian World* explores the art of gardens and the cross-fertilization of garden imagery between East and West. Gardens have functioned as spaces of invention, imagination and mythmaking, as well as places of repose and recreation, for different cultures across time. Using the pages of some 22 illustrated herbals, poetry and epic and sacred texts from the museum's collections, the exhibition focuses on the transmission, exchange and assimilation of garden imagery and metaphors between the Islamic and Christian worlds in the late medieval and early modern eras. The show addresses the image of the garden as an expression of love, power, philosophy, spirituality and knowledge, evoked through word and image. Walters Art Museum, **Baltimore**, June 30 through September 23.

**PERMANENT**  
**Galleries for the Art of the Arab Lands, Turkey, Iran, Central Asia, and Later South Asia** are a new suite of 15 enlarged, renovated and freshly conceived galleries for one of the world's finest and most encyclopedic collections. Under construction for nearly eight years, the galleries trace the course of Islamic civilizations over 13 centuries from the Middle East to

North Africa, Europe, and Central and South Asia. "This new geographic orientation signals a revised perspective on this important collection, recognizing that the monumentality of Islam did not create a single, monolithic artistic expression, but instead connected a vast geographic expanse through centuries of change and cultural influence," says Thomas P. Campbell, director of the museum. As a whole, he adds, the galleries have been redesigned to "evoke the plurality of the Islamic tradition and the vast cross-fertilization of ideas and artistic forms that has shaped our shared cultural heritage." Metropolitan Museum of Art, **New York**.

**Silk Road Luxuries from China** reveals the cross-cultural impact of Silk Road trade on Chinese luxury goods. The intermingling of Chinese traditions and foreign influences led to a remarkable change in luxury goods produced for Chinese urban elites in the sixth through the eighth century, fueled by an open and cosmopolitan multicultural society centered in the Tang capital, Chang'an. A small but exquisite array of 21 objects, including intricately decorated mirrors, cups and other forms of tableware, display the high levels of craftsmanship practiced by Tang Dynasty artisans working in precious materials. Freer Gallery, **Washington, D.C.**

**New Ancient Egypt and Nubia**  
**Galleries** redisplay the Ashmolean's world-renowned Egyptian collections and exhibit objects that have been in storage for decades, more than doubling the number of mummies and coffins on display. The new galleries will take visitors on a chronological journey covering more than 5000 years of

human occupation of the Nile Valley, presenting the collections under the broad themes of Egypt at its Origins; Dynastic Egypt and Nubia; Life after Death in Ancient Egypt; The Amarna "Revolution"; Egypt in the Age of Empire; and Egypt meets Greece and Rome. Ashmolean Museum of Art and Archaeology, **Oxford, England**.

**Louvre Abu Dhabi:** *Talking Art Series* brings together specialists, curators and academics to introduce to the public the content of the future Louvre Abu Dhabi Museum. Lectures are the last Wednesday of each month; planned topics are "Painting in the Italian Renaissance" (January), "Reminiscences of the Orient and the Far East in Western Art of the 18th Century" (February), "Mannerism and Realism in the 19th Century" (March), "From Art Nouveau to Art Déco in Europe" (April) and "Dreams of Elsewhere, Nightmares and Hallucinations: The Themes of Surrealism" (May). The Louvre Abu Dhabi is designed to be a "universal museum," addressing the historic achievements of the world's major cultures from the viewpoint of a traditional crossroads of trade and cultural exchange. Manarat Al Saadiyat, **Abu Dhabi, UAE**.

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 eight weeks in advance 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.

*Saudi Aramco World* is published bimonthly in print and on-line editions. Subscriptions to the print edition are available without charge to a limited number of readers worldwide who are interested in the cultures of the Arab and Muslim worlds, their history, geography and economy, and their connections with the West.

**To subscribe to the print edition** electronically, go to [www.saudiaramcoworld.com/about.us/subscriptions/new.aspx](http://www.saudiaramcoworld.com/about.us/subscriptions/new.aspx). Fill out and submit the form. To subscribe by fax, send a *signed and dated* request to +1-713-432-5536. To subscribe by mail, send a *signed and dated* request to *Saudi Aramco World*, Box 469008, Escondido, California 92046-9008, USA, or mail the subscription card bound into the printed magazine. If requesting a **multiple-copy subscription** for a classroom or seminar, please specify the number of copies wanted and the duration of the class. All requests for subscriptions to **addresses in Saudi Arabia** must be mailed to Public Relations, Saudi Aramco, Box 5000, Dhahran 31311, Saudi Arabia.

**Change of address** notices should be sent electronically to [www.saudiaramcoworld.com/about.us/subscriptions/change.aspx](http://www.saudiaramcoworld.com/about.us/subscriptions/change.aspx), or by fax or mail to the addresses above. In the latter cases, please be sure to include your customer account number, or an address label from a recent issue, or your complete old address.

**Back issues** of *Saudi Aramco World* and *Aramco World* from 1960 onward can be read on-line, downloaded and printed at [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). Click on "Indexes." The issues are available in text form through September/October 2003, and with photographs and illustrations for subsequent issues. Printed copies of back issues, to the extent they are still in print, can be requested by e-mail ([saworld@aramcoservices.com](mailto:saworld@aramcoservices.com)), fax (+1-713-432-5536) or postal mail (Special Requests, *Saudi Aramco World*, Box 2106, Houston, Texas 77252-2106, USA). Bulk copies of specific issues for use in classrooms, workshops, study tours or lectures will also be provided as available.

**Indexes:** A cumulative index is available on-line at [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com). It is fully text-searchable and can also be searched by title, subject or contributor.

#### Permissions:

**Texts** of articles from *Saudi Aramco World* and *Aramco World* may be reprinted without specific permission, with the conditions that the text be neither edited nor abridged, that the magazine be credited, and that a copy of the reprinted article be provided to the editors. This general permission does not apply, however, to articles identified as reprints or adaptations from other sources, or as being copyrighted by others.

**Photographs and illustrations:** Much of *Saudi Aramco World*'s photo archive can be accessed through the *Saudi Aramco World* Digital Image Archive (SAWDIA). Go to [www.photoarchive.saudiaramcoworld.com](http://www.photoarchive.saudiaramcoworld.com). You can search for and order images without charge.

**Unsolicited Material:** The publisher and editors of *Saudi Aramco World* accept no responsibility for unsolicited manuscripts, photographs or illustrations submitted for any purpose. Article proposals should be submitted in writing and with patience. Self-addressed stamped envelopes are not required, as they constitute too great a temptation for the editors. Guidelines for contributors can be found at [www.saudiaramcoworld.com/about.us/guidelines.htm](http://www.saudiaramcoworld.com/about.us/guidelines.htm).

 **Find us on Facebook**



**► Young Reader's World**

Young Reader's World, at [www.saudiaramcoworld.com](http://www.saudiaramcoworld.com), offers 18 of our most popular feature articles, abridged and adapted for readers aged 9 to 14.



