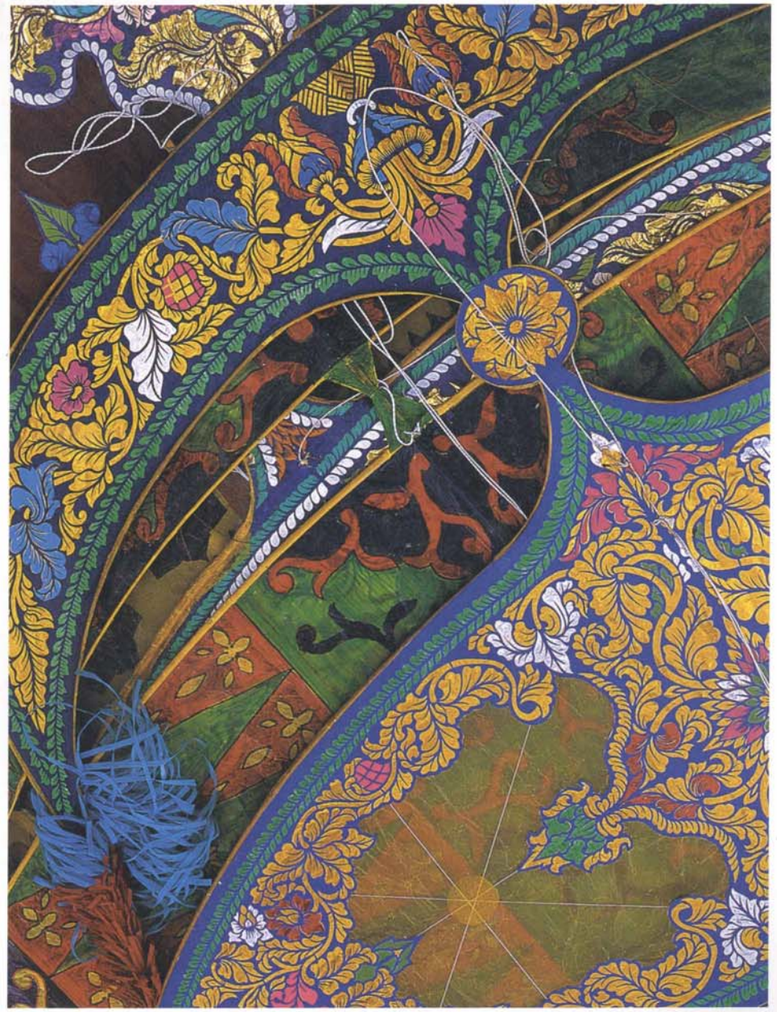

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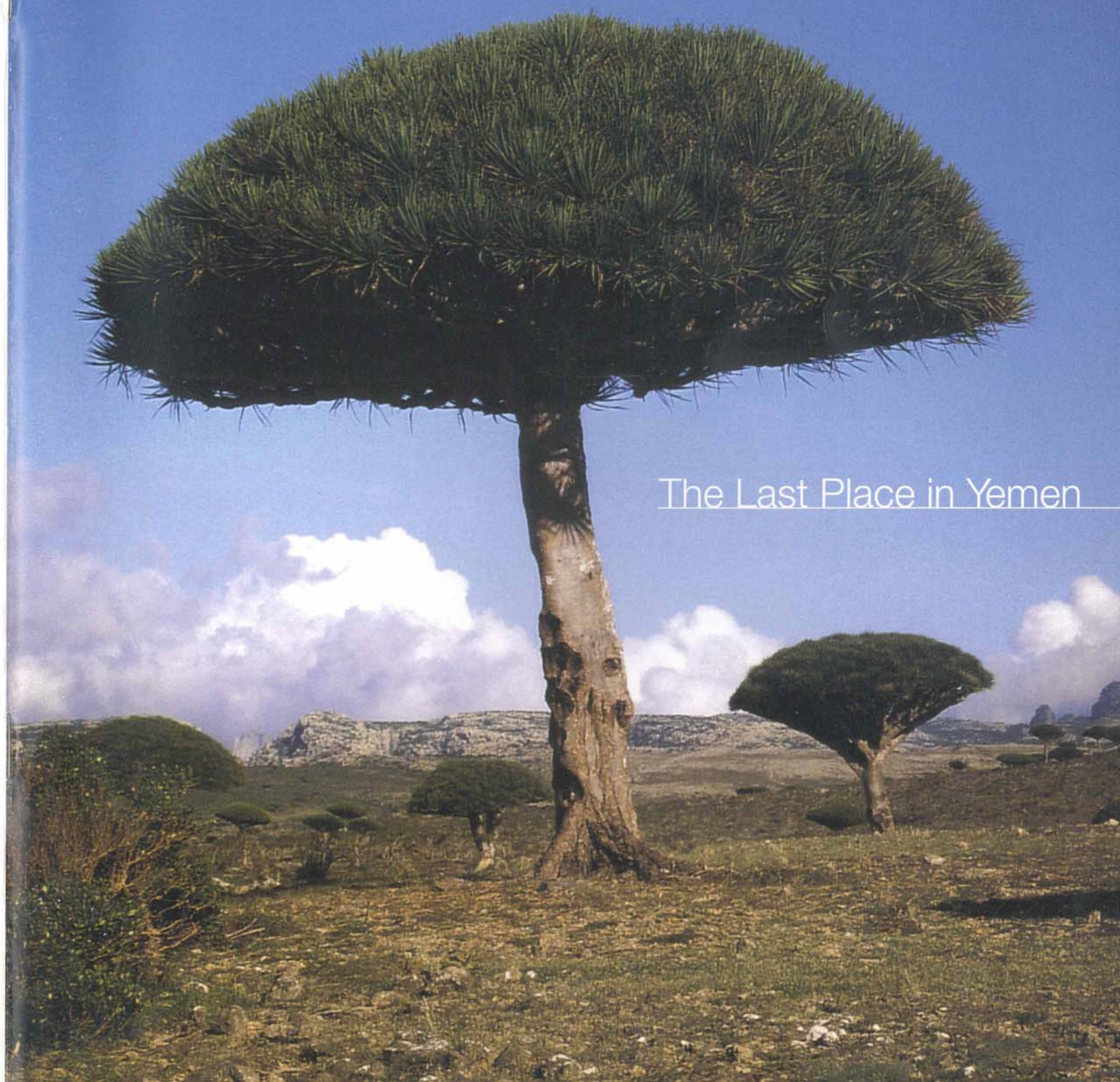
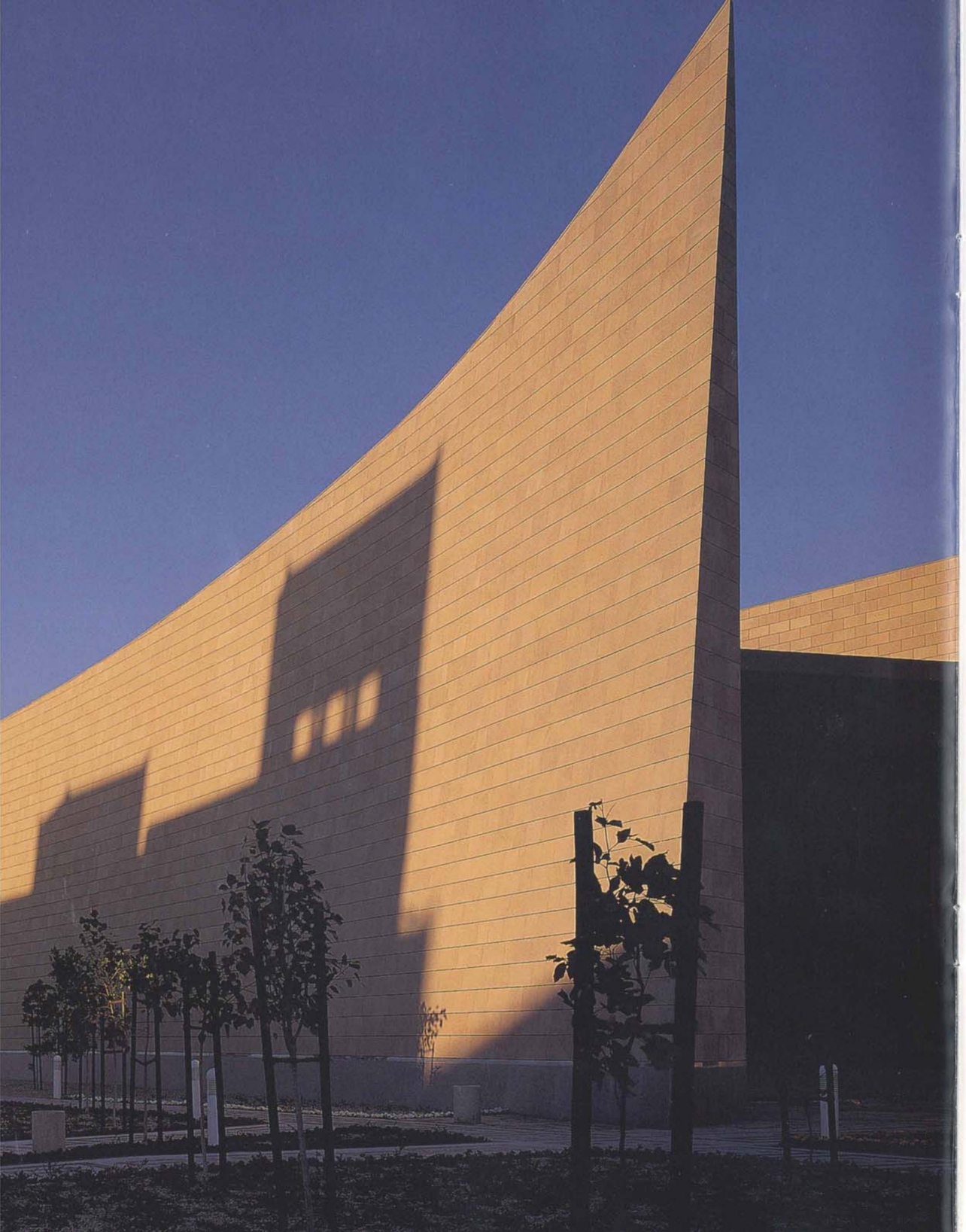


The Last Place in Yemen



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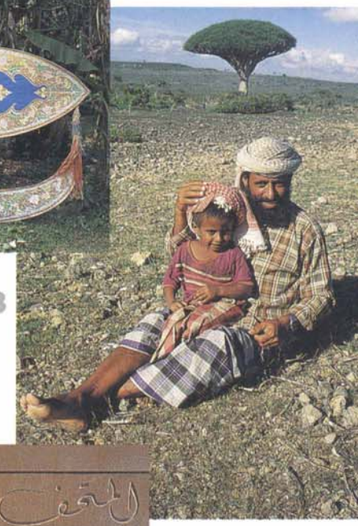

COVER:
Mushroom-shaped dragon's-blood trees dot a savanna landscape on the Yemeni island of Suqutra, about a third of whose plant and animal species exist nowhere else. The trees' sap, an astringent, garnet-red resin, was once traded widely as a valuable medicinal commodity, and in recent times was used in violin varnishes and Chinese lacquer, and as a photo-engraving resist. Today it is used only locally as a dye, a glue and—again—medicinally, to treat skin, eye and stomach ailments. Photograph by Wolfgang Wranik.

OPPOSITE:
The shadow of a research center and museum dedicated to King 'Abd al-'Aziz Al Sa'ud falls on the dune-shaped façade of Saudi Arabia's new National Museum in Riyadh, whose aim is to tell the history of Saudi Arabia to the country's citizens and visitors. Photograph by Ajon Moriyama.

BACK COVER:
Elaborate vegetal designs in cut paper, as fine as brocade, decorate show kites in Malaysia. Photograph by Eric Hansen.

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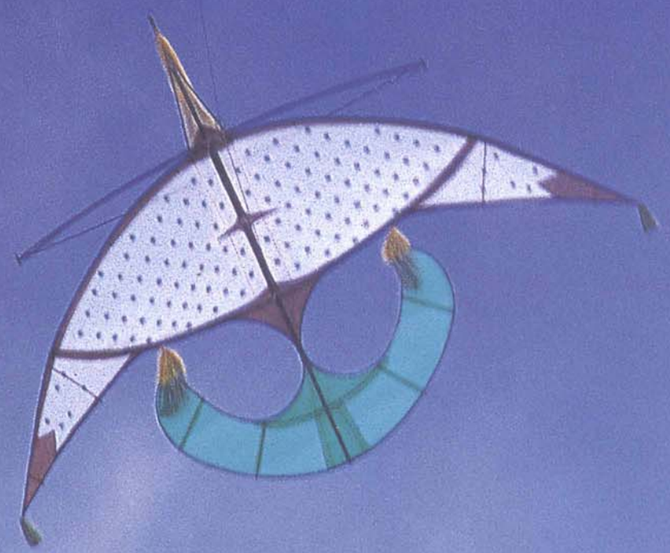
THE Singing Kites OF Kelantan



WRITTEN AND PHOTOGRAPHED BY ERIC HANSEN

I awoke at dawn as a soft light filtered through the green canopy of coconut palms. A rooster crowed, a fly buzzed, and a warm sea breeze was blowing off the South China Sea. Somewhere overhead, I could still hear the droning sound of a musical kite. The kite was tied to a tree, and it had been flying all night.

I was staying in Kampong Jambu, a Malay village of rice farmers and kite makers. It is in the northeast corner of Malaysia, not far from Kota Bharu, the capital of the state of Kelantan. The people of Kelantan are well known for their excellent kites, and in most rural villages, beautifully made, often ornately decorated kites hang beneath the eaves of private homes. I was visiting the villages near Kota Bharu to talk with the master kite-makers, and to watch the Pesta Wau, the annual, five-day kite festival held in late May of each year to help celebrate the end of the rice harvest. At this time of year, the northeast monsoon provides favorable winds for kite flying, and thousands of villagers attend. I was also curious to know why the men of this region are so passionate about flying kites.

Joseph Needham, author of the multi-volume *Science and Civilization in China*, speculated that kites were first flown in China nearly 2000 years ago. In Mandarin, they are called *mu yuan*, which literally means "wooden kite." *Yuan* is Mandarin for the small, graceful hawks of the Milvinae subfamily, which in English are called "kites." However, the Malay word for the wooden, crafted kite is *wau*, and it is unrelated to the Mandarin. One popular suggestion for its origin is that it comes from the Arabic letter و , pronounced "wow," which when written in a mirror-image pair approximates the bird-like shape of a traditional Malay kite: ﻭﻭ .

Details from the famous cave frescoes at Dunhuang, in China's Ganxu Province, depict the recreational use of kites in the year 698. The Islamic world knew of flying kites from at least the ninth century, when the writer Abu Uthman al-Jahiz, in his book *Kitab al-Hayawan (Book of Animals)*, describes boys flying kites made of Chinese paper. It is uncertain when kite-flying came to the Malay Peninsula, but there is anthropological evidence that kites have been in use in many parts of Southeast Asia since ancient times. They remain popular today in southern China, Indochina, India, Indonesia, Melanesia and Polynesia, and in Japan, where kites are flown recreationally and "fighting kites" are flown in fierce competition.

Above: *Though most Kelantan kites can be launched by one man while another holds the line, launching larger ones may require several people.*
Opposite: *A six-meter "quail kite" moored in the sky. Kite-flying marks the end of the rice harvest, a season that brings steady winds.*

The earliest literary reference to Malay kite-flying is of kite combat. An account from the *Sajarah Malayu (Malay Journals)* tells how, in the late 15th century, during the season of paper kites, Rajah Ahmed, son of Sultan Mahmud of Malacca (1488–1511), had his favorite kite cut from the sky by a boy who had secretly coated his kite string with tree sap and powdered glass. (Today, kite-fighting experts debate the relative merits of different types of glass and porcelain for the same purpose: One popular choice is the glass of pulverized television tubes.)

But the people in Kelantan have developed a peaceful and aesthetic approach to kite flying. In the small villages around Kota Bharu, men and boys can be found launching kites on the steady winds of late afternoon. The kite flier then sits back to enjoy "the song of the kite," which is generated by a bow fastened to the kite's neck that, once airborne, resonates in the wind to produce a melodious, droning note. The sound is akin to that produced by blowing against a sheet of paper held up to a comb, and the volume and pitch rise with the speed of the wind. An experienced flier can identify a kite simply by its "song."

The kite bows were originally strung with a dried palm leaf called *daun pokok mulung*, but today most kite makers prefer either 16-millimeter acetate movie film or, for the most refined sounds, industrial plastic

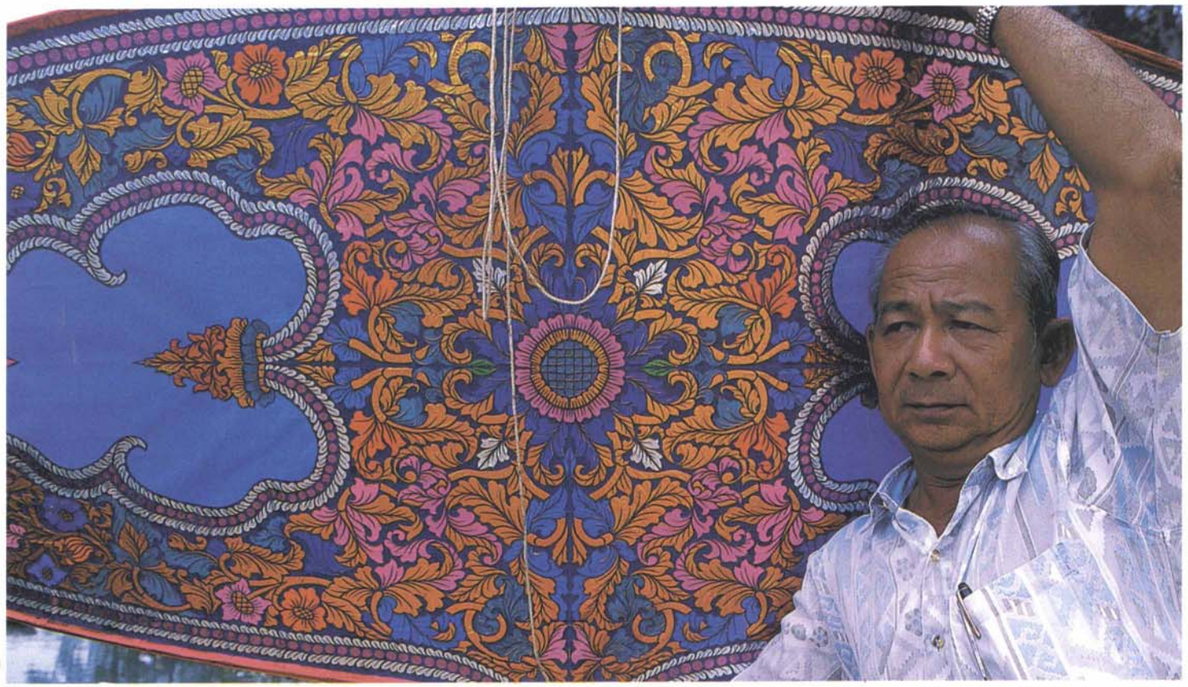
***Above:** Some kites are built not for flight, but rather to display a craftsman's artistry, as with this cut-paper design by Yasok bin Haji Umat.*
***Below:** Detail of a* wau bulan*, or "moon kite."*
***Opposite:** Master kite maker Ismail bin Jusoh has been building kites for 60 years, since he was about 12 years old.*

pallet-strapping that has been shaved thin with the edge of a piece of window glass. In the steady winds that prevail at the time of the monsoon, a well-balanced kite can easily fly until dawn, and its sonorous tones can be a soothing contrast to the usual night sounds of a Malay village.

Yusof bin Senik, from the village of Kampong Jambu, was the first kite maker I met. He learned how to make kites from a childhood friend nearly 30 years ago, and he has been building them ever since. Yusof showed me examples of *wau kuching*, "the cat kite," *wau bulan*, "the moon kite," *wau burung puyuh*, "the quail kite," and *wau jala budi*, "the fish-net of wisdom kite." Despite their different names, these kites all share the same basic, bird-like shape, with slight variations in their wings and tail.

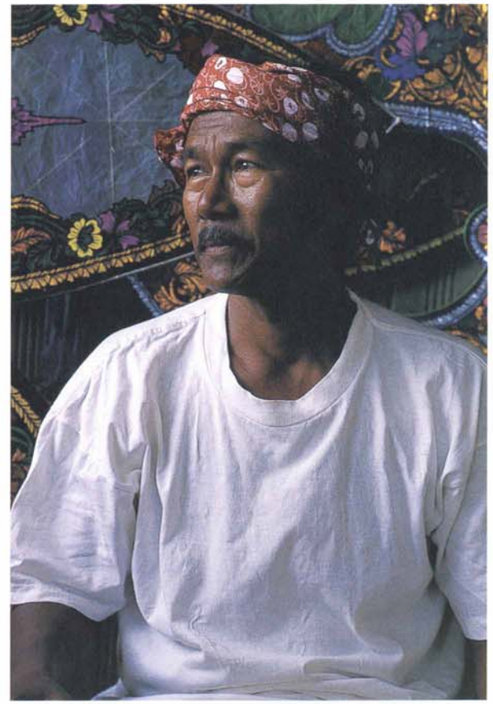
The frames of these kites are made in the traditional way, from strips of seasoned bamboo and rattan that are then reinforced with a network of string that also supports the wing covering, which may be either paper or plastic. Decorative kites, not designed for flying, are covered with intricate cut-paper designs, while the no-nonsense flying kites have less decoration. They are also carefully balanced with lead weights, and reinforced to survive crash landings. Although most Malay kites are about a meter wide or a bit more (3–4'), Yusof showed me one of his quail kites that measured some six meters (almost 20') from wing tip to wing tip. It looked like a hardwood spear attached to an almond-shaped wing and a crescent moon tail, both of which were stretched taut with pink and black plastic.

In the nearby village of Kampong Gertak Sagu Panchor, I found kite master Yasok bin Haji Umat on the front porch of his house. After the rice harvest, this is where he spends his time, assembling layers of intricately cut and pasted paper designs. These stylized motifs are, he says, taken



from cloud patterns, architectural wood carvings, local vegetation and the floral borders of batik fabrics. Yasok's kites are purely decorative, for they are fragile and, at a cost of about $75 to $100 each, intended for display only. He learned kite-making from his father, but his own son will not be carrying on the tradition. "Today, young people are not interested in kites," he says.

Friday is the traditional day for village kite competitions, and during May, June and July it is not uncommon to see kites flying above the palm trees while large crowds of men stand in the fields to cheer on their favorite kites. The flights have a time limit and, in the past, before mechanical clocks became commonplace, the timing device was a half coconut shell with a hole drilled in the bottom. On a signal, the kites were launched and the coconut shell was placed in a bucket of water of a standard depth. When the shell sank and touched the bottom of the bucket, the kite flying highest at that moment was declared the winner.



Yasok bin Haji Umat, who spends the time after each rice harvest building kites, says he takes his patterns from clouds, carved-wood architectural motifs, local vegetation and the floral borders of batik fabrics. ***Opposite:*** *A contestant at the annual Pesta Wau, or kite competition, adjusts the sounding bow—strung with plastic pallet-strapping—on his* wau jala budi, *or "fishnet of wisdom kite."*

At this year's Pesta Wau competition, teams came from all over Malaysia. Hundreds of traditional kites from different villages and states flew in preliminary rounds leading up to final competitions among the best in each category, based on style and name—"moon kites," "cat kites," and so on. The kites are flown by two-man teams, each made up of a *juru tarik* ("master puller," or flier) and a *juru anjung* (the "master high-holder," or launching assistant). To fly the kite, first the *juru tarik* lets out the full, regulation length of 150 meters (480') of string while the *juru anjung* carries the kite to the launch area and holds it aloft. At the buzzer, all 20 kites in that 10-minute "heat" rise, zigzagging and colorful. While the *juru tarik* controls the flight, it is up to the *juru anjung* to stand by in case a crash—which incurs a small penalty—should require another launch.

The site of this contest is a beach called Pantai Sen Tujuh, approximately 20 kilometers (12 mi) north of Kota Bharu, near the town of Tumpat. The field measures about 300 meters (1000') long, and it is laid out to catch the prevailing winds. This means that the line of kite flyers, standing in a row at the center line of the field, can use either onshore or offshore winds. As each kite rises and seeks a fixed position, it is scored by an official judge. One of the judges, Ismail Bukhary, explains that 30 percent of the score is based on the beauty of the design; 40 percent on the angle of flight (the closer to vertical the higher the score); 20 percent on the kite's airborne stability, and 10 percent on the music of the kite.

During the three to four hours of daily competition, thousands of family members, friends and spectators sit on blankets in the shade of the casuarina trees that grow at the edge of the kite-flying field. Mixed in with the crowd, the competitors tune up their kites and make last-minute repairs. Food and drink vendors do an excellent business selling local favorites such as deep-fried shrimp and calamari along with iced lychee drinks, fresh coconut water and sugar-cane juice.

On the final day of the Pesta Wau, kite teams from Europe and the United States put on an airborne show of elaborate, experimental kites made with carbon-fiber rods and rainbow-colored synthetic fabrics. This held the crowd's interest until local kite master Shafii bin Ahmad emerged from the trees carrying an eight-meter (25') quail kite and a ball of parachute cord the size of a watermelon. From that moment on all eyes were on this little man and his giant kite.

Bin Ahmad had waited for the afternoon wind to steady itself, but now the conditions seemed just right, and he was ready to show the crowd his best. Kites of this size have been flown as high as half a mile, but, depending on the strength of the wind, it may take six men to successfully launch and control the flight. It can also be dangerous: Not long ago I had witnessed a six-meter (19') quail kite plunge into a salt marsh and impale the earth like a spear. It had taken two men to dislodge the hardwood shaft. Weeks earlier, a different kite on a test flight had pierced the roof of a parked car.

Bin Ahmed made one final adjustment to the angle of the bridle before fastening the kite to his parachute cord. A few minutes later he was standing some 200 meters (650') away, ready for the launch. His assistants held the kite off the ground and then, without any apparent signal, the giant kite was in the air. The deep booming drone of its three-meter (10') humming bow brought the kite to life, and the rich vibrato seemed to galvanize the crowd, which immediately broke out into cheers urging the kite to climb higher and higher.

Standing at my side, 72-year-old Ismail bin Jusoh watched the kite lift into the sky. Ismail had built kites for nearly 60 years, but the look in his eyes made it clear that he had not lost a bit of the childhood thrill of seeing a kite well flown. Amid the commotion, I turned to Ismail and asked him why people were so passionate about kites.

"Why do we fly kites?" He laughed as he watched the powerful kite continue its breathtaking ascent. "They are beautiful, they are exciting to fly. They can even make an old man like me feel young once again."

Writer and photographer Eric Hansen has spent 25 years documenting contemporary village life in the Middle East and Southeast Asia.

For much of the year, mists shroud the peaks of the 1500-meter (4900') Haghier Mountains above Hadibu, the largest settlement on the island of Suqutra. Its 3625 square kilometers (1400 sq mi) little explored by scientists, Suqutra has been biologically isolated since Tertiary times, and about a third of its plants and animals occur nowhere else. Such endemic species include, **above, from left,** the chameleon *Chamaeleo monachus,* one of 24 endemic reptiles; the Socotra sparrow *(Passer insularis),* the most common of the island's six endemic birds; *Scolopendra valida,* a meat-eating centipede with a painful bite; the damselfly *Enallagma granti,* the sole endemic of 20 dragonfly species recorded on the island; a male land crab of a nocturnal species not yet named, found in 1997 at 700 meters' altitude (2300') in the middle of the island; the fruit of the cucumber tree *(Dendrosicyos socotranus),* one of many Suqutran plants that has adapted to seasonal rain and drought by storing water in its tissues; *Phaulotypus insularis,* a bizarrely shaped grasshopper relative that is one of some 25 endemic species of jumping insects; and the perennial *Babiana socotrana,* a member of the iris family.

The Last Place in Yemen

Written by Tim Mackintosh-Smith

Photographed by Wolfgang Wranik

Excerpted from *Yemen: Travels in Dictionary Land*
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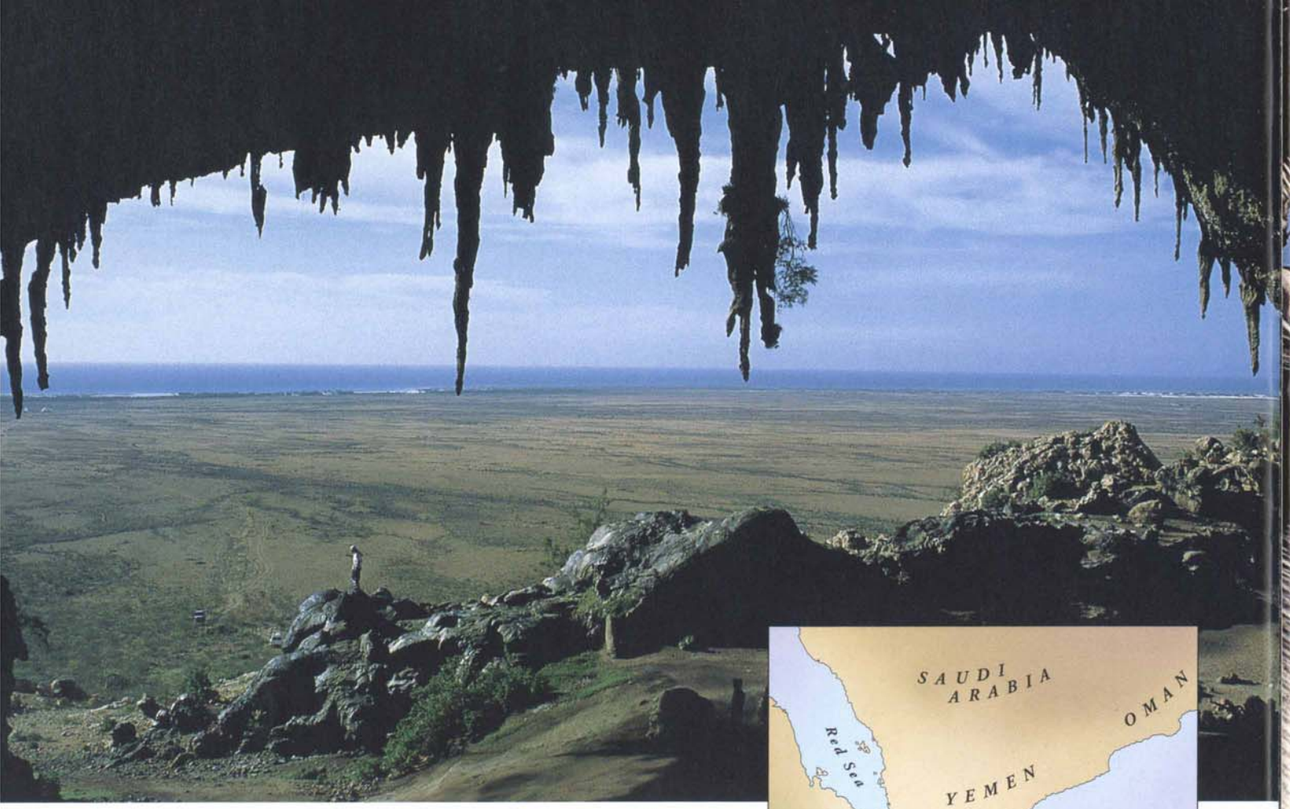
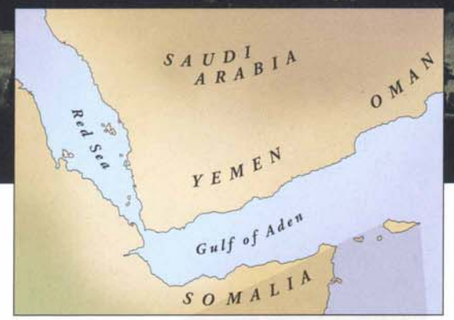
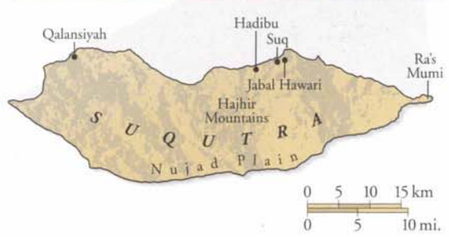






The island of Suqutra, with the clarity of its light, the grotesqueries of its landscape, with its almost palpable *genius loci*, is the last great sidetrack in Yemen.

Suqutra had always been unattainable. Waq Waq, the Arab Ultima Thule, seemed hardly more distant. Yet there it was on the map, somewhat larger than Skye, butted off the Horn of Africa, nearer to Somalia than to Yemen. But to get there… It might as well have been a place in a dream.

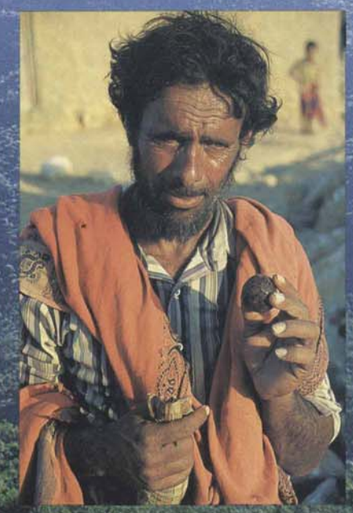
The origin of the island's name is in itself obscure. Arab writers have glossed it as *suq qatr*, the Emporium of Resin, but it probably derives from the Sanskrit *dvipa sakhadara*, the Island of Bliss. This in turn may be a version of *Dh Skrd*, which appears in South Arabian inscriptions and seems to have given the Greek geographers their home-grown sounding name for the island, Dioskurida. The etymological enigma is compounded by questions about the racial origins of the Suqutris, whose veins are thought to flow with South Arabian, Greek and Indian blood, with perhaps a dash of Portuguese.

Medieval writers did their best to shroud the island in a mist of dubious or downright incredible facts. Ibn al-Mujawir says that for six months of the year the Suqutris were forced to play host to pirates, who seem to have worked *en famille*: "They are a mean bunch, and their old women are meaner than their men." For defensive reasons, he writes, the islanders took to sorcery, and when the late 12th-century Ayyubids sailed for Suqutra with five warships, the Suqutris magicked their island out of sight. For five days and nights the Ayyubid fleet quartered the seas, but found no trace of it.

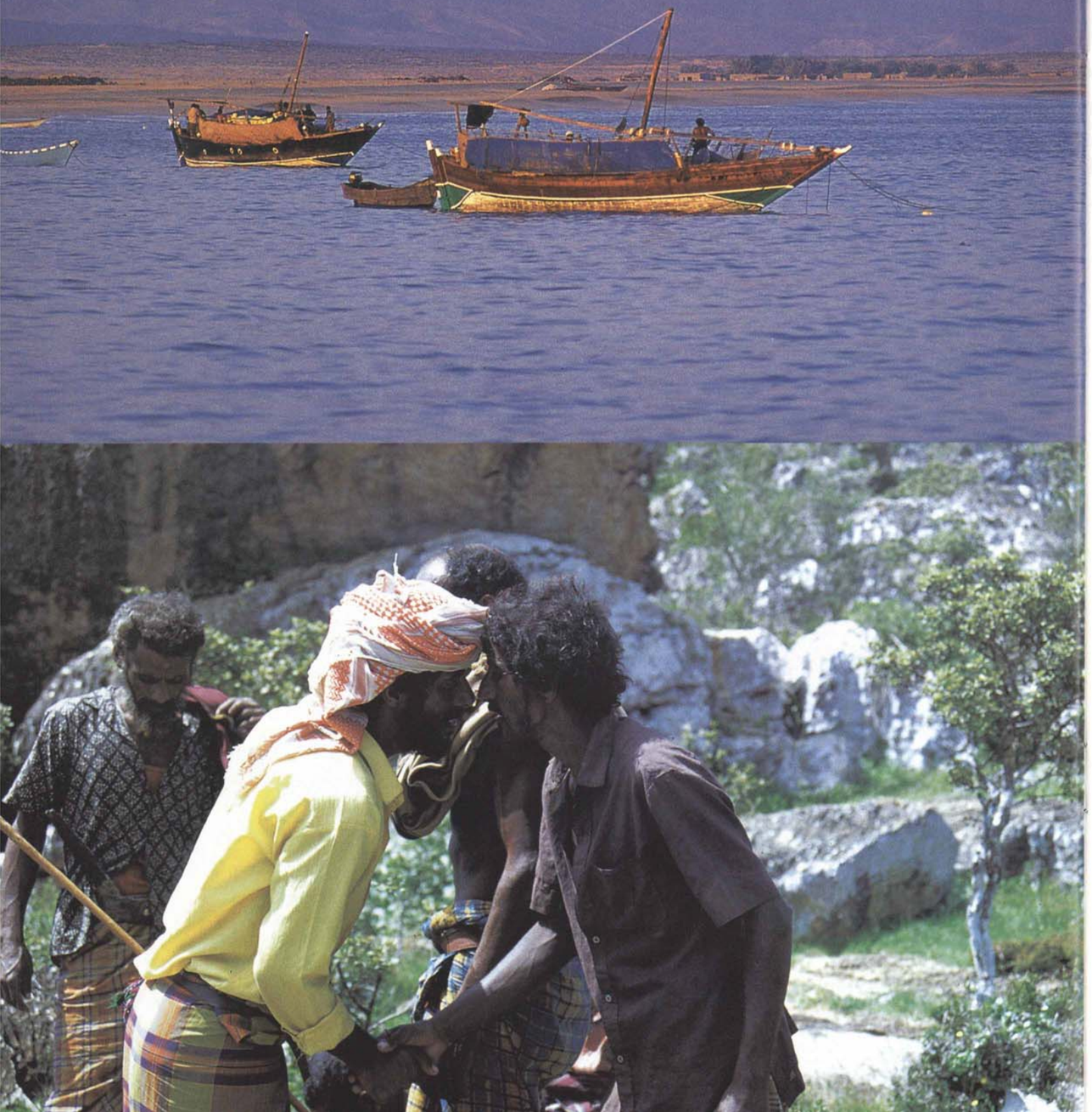
Eight centuries on, Suqutra occupies an apparently stable position 12½ degrees north of the Equator. It is home to a breed of dwarf cattle, to wild goats and donkeys, and to civet cats, which lurk in an eccentric arboretum where a third of the flora is unique to the island. The only pictures of Suqutra I had seen were of trees like yuccas and other potted plants but bizarrely mutated

OPPOSITE, MAIN PHOTO: KEVIN RUSHBY

Suqutra separated from the African mainland some three to four million years ago in the same dislocations that opened up the Gulf of Aden, and small numbers of humans have subsisted on the island, fishing, farming and herding, for nearly 3000 years. The dragon's-blood tree, *Dracaenà cinnabari*, **(main photo, foreground)**, is the source of a deeply luminous, glassy, garnet-colored resin **(inset)** treasured in the ancient world for its medical uses, particularly as an astringent. The resin, which seeps from the tree's trunk when it is slashed, was in 18th-century Europe a prized varnish for violins, and in China, the famous cinnabar cabinet lacquer. Today, it is used locally as a dye, for pottery decoration, and as medication for stomach, eye and skin diseases. There are no young dragon's-blood trees on Suqutra, because of livestock grazing. **Opposite:** Overlooking the Nujad Plain along Suqutra's southern coast, the cave at Dayqyub is the largest on the island. Scientists hope to search it for fossil remains of the crocodiles, giant lizards and land tortoises reported to have lived on Suqutra in antiquity.



Salim bin Sayf's *sambuk* lies at anchor, a small craft for a nearly 500-kilometer crossing in seas notorious for their unpredictable winds and mountainous swells. **Below:** Clasped hands, a double nose-touch and little sniffs are parts of typical greetings in the mountains of Suqutra. In many aspects of life, the island's people adhere to principles of cooperation and community labor, and ecologically valuable traditional rules regulate such things as grazing and the cutting of trees. **Opposite:** A four-wheel-drive truck ends its journey from the mainland on a Suqutri beach. Because economic development on Suqutra has lagged well behind that of mainland Yemen, several thousand Suqutris live off-island, and their business initiatives and cash remittances, along with government projects in communications, medical services and education, are rapidly bringing change to the island.



OPPOSITE, TOP: KEVIN RUSHBY

and enlarged; a few illustrating a British colonial official's visit to the Sultan in 1961; and Wellsted's drawing, done in the 1830's, of a scene near the capital Hadibu, which owed more to the Picturesque than to observation. As for the written sources, my scant knowledge of the place was founded on rumor and travelers' tales.

Clearly the only way of proving the island actually existed, was not some elaborate fiction, would be to go there. But how?

For half the year, Suqutra is cut off from the rest of the world by violent storms; for the other half, a small plane is supposed to go there twice a week. The islanders number around 40,000, but I had never met a Suqutri and knew no one who had. Yemenis in the capital, San'a, if they had heard of the place, thought of it as the very margin of the world.

And then, unexpectedly, the door to Suqutra opened. I was in a shared taxi when I heard something that made me sit up. It cut through the low hum of talk, audible as a stage-whisper. It was that phonemic phantom of South Arabia, the lateral sibilant which is a *sh* hissed through the corners of the mouth. I turned to the speakers: "You must be Mahris."

"No, we're from Suqutra—if you've heard of it."

I must have stared at them longer than was polite. They brushed off my apologies and we started chatting. Sa'd and Muhammad had finished secondary school in Aden. They were going home to be teachers. "And you're flying from al-Mukalla?" I asked them.

"We wanted to, but the plane's full and will be for weeks. You see, it's the end of *al-kaws*, the season of storms, and everyone's going home. We're travelling by sea."

Less than a month after that meeting, I bade an emotional farewell to my San'ani friends. For them, the great and wide sea teems with leviathans and other terrors. "You'll end up," they said, and in all seriousness, "in the belly of a whale." At their insistence I had written my will. With me was Kevin, recently returned from four years in Kuala Lumpur, Georgetown and Chiang Mai. In the Far East he had suffered from breakbone fever and from not being in Yemen.

Three days later we arrived in the small town on the Hadramawt coast which Sa'd and Muhammad had said was the main port for Suqutra. It was late afternoon and the sun slanted, mellifluous, across a broad bay. The only craft were a few *hawris*, slender, sharp-nosed fishing boats. They hardly moved, so calm was the ocean.

At a tea house that smelt of fish we asked about a boat to Suqutra.

"I'll take you to Salim bin Sayf," said a boy. "I think he's going to Suqutra soon. And he's the best *nakhudhah* anywhere." *Nakhudhah*! That was a word with resonances! Persian for a ship's captain and used in Arabic since the time of Sindbad, it recalls the days before the sextant, before even the lodestone.

The boy took us to the far end of the street, past the school and up an alley where we knocked on a plywood door. Salim bin Sayf stuck his head through the door, bushy bearded, rheumy in the eye, the very picture of the best *nakhudhah* anywhere. He was sailing for Suqutra "on the eve of Wednesday." At first suspicious of why we should want to go by sea, he softened when we explained that as foreigners we'd have to pay for the plane tickets in dollars, which meant they would cost us five times what they cost Yemenis. Anyway, the plane was full.

We asked how much he charged. Salim tugged his beard, the gesture that means "Shame on you!" and named a ridiculously low price.

"And what about food?"

He looked us up and down. "Can you eat what we eat?"

I tugged an imaginary beard. Salim chuckled and we said goodbye until "the eve of Wednesday."

On the appointed Tuesday evening, down on the beach once more, we scanned the water. There was no sign of an ocean-going vessel. A child was standing in the shallows, lazily casting a weighted net into the water. We walked over to him, fearing the worst. "Where's the *nakhudhah* Salim bin Sayf?" I asked.

"I don't know." He cast the net again. "But that's his *sambuk* out there." The boy pointed to a boat that seemed little bigger than a *hawri*. The only difference was that it had a single forward-raking mast. The hull was painted red and yellow.

"*That's* the one that goes to Suqutra?" The boy nodded.

The seas around Suqutra are notorious for their unpredictable winds and mountainous swell. I remembered reading an old verse, in a book of cautionary tales for sea captains, which spoke of the perils of navigating between the island and Cape Hafun, the tip of the Horn of Africa:

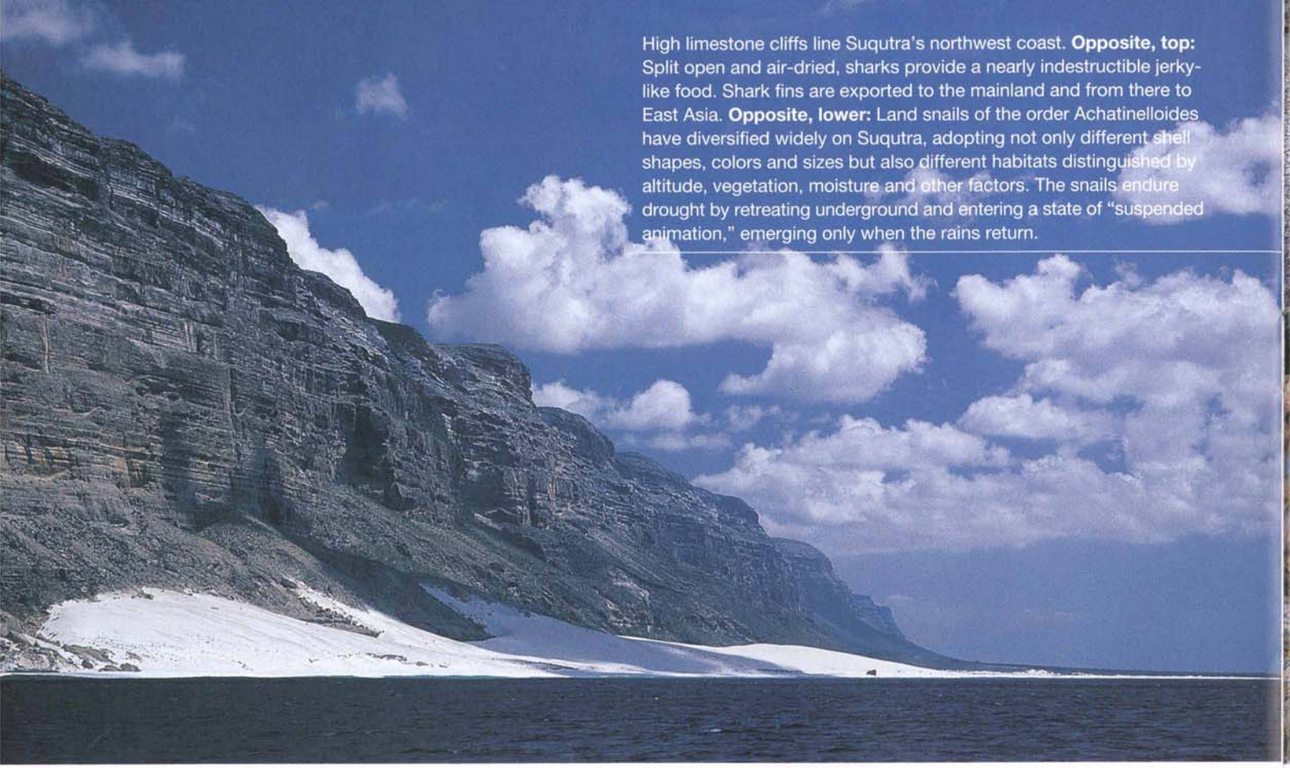
> Between Suqutra and Hafun's head,
> Pray your course be never set…

Somewhere out in the 420 kilometers (260 mi) of open ocean that separated us from Suqutra, Leviathan was licking his many pairs of lips.

On board the *sambuk*, which rolled even in this calm sea, a kerosene lamp was lit. A smear of light revealed a deck crowded with boxes, oil drums, ropes, anchors and bodies. There were 15 other passengers, already embarked and asleep. That made 23 of us in an open 10-meter (35') boat, and the voyage would last two nights and a day.

The *nakhudhah* Salim was last on board. Bare-chested, issuing orders, he had somehow grown bigger and younger. A crewman skipped below deck and cranked the engine to life; Salim produced a compass sitting on a bed of woodshavings in a twine-bound box. He lined the box up with the mast and secured it with a few nails banged into the deck. At one in the morning we weighed anchor and headed, on a course of 110 degrees, for the ocean.

Salim told me about his family. His father and his ancestors had been skippers here for as long as anyone could remember. His mother was a Suqutri from Nujad on the island's south coast. The lamp was turned low. Salim kept his eyes on the stars. A cord, looped round the hewn tiller, tightened and then slackened in his fingers.



High limestone cliffs line Suqutra's northwest coast. **Opposite, top:** Split open and air-dried, sharks provide a nearly indestructible jerky-like food. Shark fins are exported to the mainland and from there to East Asia. **Opposite, lower:** Land snails of the order Achatinelloides have diversified widely on Suqutra, adopting not only different shell shapes, colors and sizes but also different habitats distinguished by altitude, vegetation, moisture and other factors. The snails endure drought by retreating underground and entering a state of "suspended animation," emerging only when the rains return.

"Nujad is where they come down the mountains to pasture the flocks. *Lubnan*, my father calls it." Lebanon, the land rich in milk. He refolded the tarpaulin he was sitting on and wrapped himself in a large striped blanket. "They make these in Suqutra. You see, everything comes from their flocks—milk, butter, cheese, wool, meat."

"What about fishing?"

"There's some. The real Suqutris are bad sailors. That's why we Hadramis marry Suqutri girls. It puts some salt in their blood."

I looked back to where the town had been, and gone. Beneath me the diesel thumped yet, somehow, did not disturb the calm.

Salim was still at the helm when I awoke. It was as calm as ever. The sea curdled where the prow cut through it, then recongealed in the *sambuk*'s wake. An odd flying fish shot out of the water like a spat pip. In such a sea, "without a stir, without a ripple, without a wrinkle—viscous, stagnant, dead," perhaps at this very spot, Conrad's Lord Jim had abandoned the doomed *Patna*.

Our six-ton *sambuk*, the *Kanafah* (no one ever used the name, and even Salim had to think before he remembered it), had been built a few years ago in al-Shihr. Below the waterline the hull was of teak. For the rest a cheaper hardwood, *jawi*, "Javan," was used, with pine planking for the deck. Powered by a 33-horsepower Japanese engine, she was also lateen-rigged like all Arab craft but her sail would only be used in emergencies. "Diesel engines started coming in the mid-50's," Salim said. "By about 20 years ago they'd taken over completely. If we were under sail it would usually take about five days to reach Suqutra. In weather like this, much longer."

The Suqutri passengers were silent men with wild, auburn-tinted hair, wrapped in huge Kashmir shawls and looking queasy. If they did speak, it was in undertones, all aspirants and sibilants like the soughing of the wind in treetops. It reminded me of Hebridean Gaelic. To a speaker of Arabic, the Suqutri language sounds like a distant and dyslexic cousin. But occasional words are familiar and, in time, I realized that it shares with the Raymi and Yafi'i dialects of Yemeni Arabic the past-tense *k*-ending, another revenant from the ancient languages.

The second night, Salim was at the helm again and I joined him, curious to learn more about techniques of navigation and whether much knowledge had been passed down from its heyday among the Arabs, the 15th and 16th centuries. During this period, the celebrated pilot Ahmad ibn Majid led the field in a science in which mnemonic verses played the part of charts, and *nakhudhahs* held international conferences to discuss abstruse points on winds and stars.

"We all know Ibn Majid," Salim explained. "*Nakhudhahs* consider him their ancestor. But now we rely on the compass. See, we started on a course of 110 degrees. Now it's 135 degrees. By the time we reach Suqutra we'll be following a course of 150 degrees. If we went in a straight line, the current would take us into the ocean."

"And if there were no compass?"

"Ah, every *nakhudhah* knows the stars. Those two point to Mirbat in Oman; those, to Qishn; then," he went on, running his finger across the sky, "Sayhut; Qusay'ir, al-Shihr, al-Mukalla, Aden, Djibouti, Berbera, Abdulkuri, Qalansiyah, Hadibu. Every three hours you must change to a new pair of stars as the old ones fall away."

I lay back, leaving Salim at the tiller, wrapped in his woolen *shamlah*. The old familiar constellations above me were rearranging themselves. Where the Plow, Orion and the Little Bear had been, there was now an array of new signs above like the overhead route markings at a highway interchange, but on a cosmic scale.

I was awakened by the dawn call to prayer, which Hadid, one of the crew, chanted before the mast in a thin voice as penetrating as an alarm clock's bleep. A change had come over the sea. The dead, viscous surface was now alive. We were still six or seven hours off Suqutra, but even this far away the invisible island was loosing its aeolian forces on the water. Over breakfast Hadid told us that the sea off Suqutra was always *za'lan*, angry. "This is nothing. Often the waves come over the deck. I've done this journey many times, and I've usually been soaked from start to finish."

ABOVE AND OPPOSITE, TOP: KEVIN RUSHBY

And then it appeared. First just a smudge

on the horizon, it resolved into a line of cliffs with a streak of white sand at their base. We headed for a spot where the line dipped. The dip became a broad strath carpeted in seamless green, its sides framing a foreground of palms and the low cuboid houses of Qalansiyah. Hadid hoisted his red-checked headcloth as an ensign and we dropped anchor in water of incredible clarity. A couple of *sambuk*s and a few *hawri*s bobbed around us; shoals of fish darted under the hull. A *hawri* came and took us to the shore. Sa'd was there too with a notebook to list the incoming goods. Salim, Hadid and the others were greeted with a gracefully choreographed double nose-touch accompanied by little sniffs. Sa'd and I shook hands.

On board, Kevin and I had felt no discomfort from the boat's motion but now, on dry land, we were both hit by the effect of 36 hours on the ocean. My brain seemed to swivel on gimbals inside my skull. One of the passengers, a native of Qalansiyah, took pity on us and invited us home. He led us along narrow alleyways where the ground quivered and the walls throbbed. When we arrived at his house, the only two-story building in the town, he took us to an airy upstairs room with yellow walls and a repeating calligraphic frieze, the Islamic creed, "There is no god but God," stenciled in pink. We were ordered to lie down.

Half an hour later the worst of the delayed motion-sickness had worn off. It was then that I realized something was different: there had been no interrogation. Usually in Yemen a newcomer, and particularly a foreigner who speaks Arabic, is subjected within moments of arrival to intensive questioning on every subject. There is rarely any other motive than a wish to break the ice, and to this end the interrogation is very effective, preferable by far to an embarrassed Anglo-Saxon silence. It is a small price to pay for often bewilderingly generous hospitality. Here, though, no demands had been made on us. Writing of his visit to the island 160 years before, Wellsted said of the Suqutris that "the most distinguishing trait of their character is their hospitality." Nothing has changed.

The only losers in the hospitality stakes are the goats. That evening our host slaughtered one for the *Kanafah*'s crew and the two *nasrani*s. It was a skull-smashing, cartilage-wrenching occasion, a Homeric feast, its victim the first of a hecatomb which was to fall as Kevin and I wandered the island.

Salim said it was time for bed. After all, for the last two nights he had, Odysseus-like, "never closed his eyes in sleep but kept them on the Pleiades." Before turning in he spoke to Kevin and me. "Come with us tomorrow. We're going round the island to Sitayruh, my mother's village in Nujad." We agreed eagerly. "It's a ten-hour journey so we must be up before dawn. Sleep now." We bedded down with the crew in Ali's courtyard.

At 4:30 in the morning the cold was bitter. Our course took us under the lee of the cliffs, disturbing the cormorants that nested in the rock-face. Over to the southwest Salim pointed out two distant islands, the Brothers, rising from the sea like plinths waiting for statues. "That's where I go shark-fishing." At the village of Nayt, a few huts on the beach, we dropped an oil drum of salt into the sea; a boy swam out and pushed it back to the beach. Further on at Hizalah, where half a dozen tiny stone cabins clung like barnacles to a cleft in the rocks, another boy swam out and climbed into the *sambuk*. He stood on the deck, dripping, like the half-seal, half-man amphibians of Norse legend. After a panted exchange in Suqutri he plunged back into the aquamarine water and fetched a *hawri*, in which we deposited a spare anchor.

Soon after, the cliffs rose again, 500-meter (1600') walls striated horizontally and falling sheer into the sea. At last, where a tiny settlement called Subraha appeared at the foot of the cliff wall, Salim broke the spell of silence. "This is the start of the Nujad Plain, where people bring their flocks down from the mountains." Kevin pointed out that there didn't seem to be any way down. "Oh, there are paths, not that you'd call them that," Salim said. "The ledges are sometimes only this wide." He showed a span. "In some places they use ropes. And their flocks can be several hundred head."

We arrived at Sitayruh an hour before sundown. The shoreline was busy, a metropolis after so many hours of near-empty coastline. Men staggered under unidentifiable loads, draped across their backs like huge rubbery cloaks, which they tossed into a beached *hawri* before returning to reload at the little headland that formed the bay's eastern arm. Landing was precarious and we had to jump, between breakers, from the boat which took us ashore.

Kevin went to investigate the loads. They turned out to be sharks, split kipperwise, salted and dried. I found him examining a pile of fins, which they call *rish*, feathers. Some were enormous and had been cut off the hammerheads and makos whose flesh was stacked nearby. While this is exported to Hadramawt, the Suqutris themselves are said to be fond of the shark's liver, salted

and preserved in its stomach. The fins were sold on the mainland for 1200 *shilin*s a kilo, around $30 at the time. "We know they go to the Far East," said a voice from beneath one of the sharks, "but what do they do with them? They must be crazy to pay that much. Praise God!"

Hadid, who, like Salim, also had a wife here, appeared and led us over the dunes to the village. The houses were compounds of single stone rooms, bewigged with palm-frond thatch and surrounded by fences of the same material. We sat in Hadid's yard, eating dates and drinking coffee, until the evening prayer. A bowl of *rawbah* was passed round. In Yemen, *rawbah* refers to milk after the fat has been removed to make ghee; it is poured into a goatskin, which is inflated with a lungful of air and sealed, and then left to turn sour. Slightly sparkling, the Suqutris are addicted to it. At first we found it delicious; a fortnight later we were sick of the taste.

Hadid, Kevin and I went that night to Salim's house, where the crew and most of Sitayruh's adult male population sat waiting for more goat. The large compound was mostly in darkness, with a couple of lanterns making feeble pools of light. When the food arrived, we ate in silence while Salim carved bite-sized chunks of meat with which he constantly replenished a pile on top of the huge plate of *rawbah*-soaked rice. The evening went on. Riddles were told, tongue-twisters recited in Suqutri, English and San'ani Arabic, everyone laughing at my attempts to produce a lateral sibilant. Gradually, conversation changed to Suqutri, then subsided, until you could hear the beating of moths' wings against the lamp-glass.

The tree succulent *Dendrosicyos socotranus,* with its conical trunk and tuft of leaves, resembles an upside-down carrot, but both characteristics help it store and conserve water. It grows as tall as seven meters (23') on Suqutra's limestone escarpments. **Top:** *Gasteracantha sodalis* is a small, common spider that inhabits higher altitudes and comes in a variety of colors. **Above, right:** One of two endemic skink species, *Parachalcides socotranus* is believed to be largely nocturnal and lives in the highlands; its larger, more common counterpart is diurnal. **Opposite:** A young woman at home in east Suqutra.

RIGHT AND OPPOSITE, BOTTOM: KEVIN RUSHBY

Kevin edged closer to the bush, camera poised. The snake lay coiled and motionless, its gray and orange stripes camouflaging it against the twig shadows and sand. The lens was inches from it.

"They did say there weren't any poisonous snakes in Suqutra," he whispered, without turning his head. "Didn't they?"

"Yes, but I'm taking no responsibility for…"

The shutter clicked, the snake reared, swayed, then looped off. We found out later that it was a harmless desert boa, probably of the type called *Eryx jayakeri.*

So this was the Nujad Plain, Salim's land of rich pastures: a dry waste of dunes and low bushes.

We had set off early along the beach, then struck inland for Mahattat Nujad. "It's an hour and a half if you take it easy. And Mahattat Nujad is *full* of shops. And cars. You'll have no problems getting a ride to Hadibu," Salim told us. Five hot hours later we arrived at Mahattat Nujad. We had lunch in the police station; after the meal, we asked the policemen if there was a car to Hadibu.

"There may be one." The "may" was ominous. "In a couple of days."

The crossing of Suqutra to Hadibu, a direct distance of around 40 kilometers (24 mi), actually took four hours. It could have been quicker, but Ali Shayif, who drove us there in his pick-up, had to stop time and again to unblock his fuel filter or beef up the truck's sagging springs with wooden wedges, banged in with stones.

The next day we crossed the arena of the Hadibu Plain on foot. At the foot of the great shattered grandstand that backed it the going got rougher; the Hajhir peaks, said to be one of the oldest bits of exposed land on Earth, are of granite, but with a limestone topping that has crumbled and fallen like icing from a badly cut wedding cake. Fragments as big as houses, riddled by erosion, were home to shaggy goats which sat eyeing us from their niches like dowagers in opera boxes.

We made for a gap far above. As we climbed, the vegetation grew denser, streams appeared in unexpected clefts, and now and again one of us would exclaim at some new discovery, a spider's web constructed on perfect Euclidean principles or a caterpillar in poster-paint colors. But it was the plants that fascinated us most. Nondescript bushes erupted into bunches of asparagus, trees turned into organ pipes then chimney-sweeps' brooms, begonia-like flowers sprang from pairs of enormous conjoined boxers' ears.

Sap, juice, resin and gum exude from branches and leaves so fleshy they often suggest the animal more than the vegetable. Several species are edible. There are tamarinds, grape-like berries, wild pomegranates and wild oranges. Frankincense and myrrh made Suqutra an important outpost of the thuriferous mainland regions in ancient times, and other plant species produce everything from incense-flavored chewing gum to a kind of birdlime. Medicinal plants abound and the Suqutris use them regularly to treat scorpion stings, rashes and wounds. For over two millennia, one of the island's most famous products was the Suqutri aloe, whose soothing sap gained popularity in seventeenth-century Europe with the rise of the East India trading companies.

Nearer the crest, the vegetation thinned. Limestone gave way to naked granite. Suddenly, above us and sharply outlined against a brilliant sky, there appeared what at first seemed to be a line of giant conical funnels, their narrow ends stuck in the skyline. The upturned cones resolved as we got closer into branches, topped with spiky leaves and bursting out of a central trunk like fan-vaulting in a chapter house. Even after all the other weird flora, the sight was startling: it is with good reason that this, the dragon's-

blood tree, has become Suqutra's unofficial emblem. Botanically, and by one of those evolutionary quirks that makes the rock hyrax a cousin of the elephant, *Dracaena cinnabari* is a member of the lily family. The common name, according to Pliny, derives from blood shed during a fight between an elephant and a dragon, from which the trees sprang. Dragon's blood was formerly in great demand as an ingredient of various dyes, including those used in violin varnish and the palates of dentures; medieval European scribes made ink from it, and Chinese cabinet-makers used it in the famous cinnabar lacquer. Now, consumption is almost entirely local—the Suqutris use it to decorate pots and as a remedy for eye and skin diseases.

I climbed one of the larger trees, perhaps six meters (20') tall to the flat bristly top of its canopy. Its smooth bark was marked by scabs where the resin had oozed out and coagulated. In one of the highest branches I found a tiny lump that had been missed by the harvesters. It was globular and brick-red, the outside matte, the inner face glassy where it had been stuck to the tree.

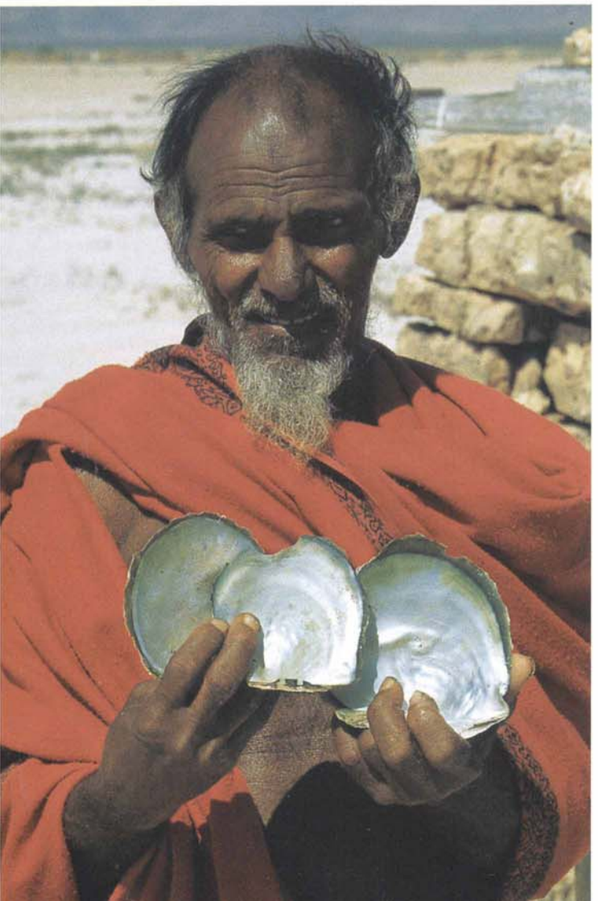
A few miles east of Hadibu, along a shore that crunches with a litter of shells and coral, lies the village of Suq, the island's original commercial center. Proof that it was so in ancient times came from excavations carried out by a Yemeni–Soviet team of archaeologists, who discovered fragments of a Roman amphora and other, possibly Indian, imported wares. Suq was still Suqutra's capital when the Portuguese decided to occupy the island in 1507.

We had come to visit the fort of St. Michael, which the Portuguese captured from a Mahri garrison and rebuilt. It lies on a

spur of Jabal Hawari, the eastern limit of Hadibu Bay. Most of the inhabitants of Suq seemed unaware of its existence, but eventually a boy showed us the way. A scramble up a rough track brought us to a flattish area filled with the remains of a cistern, bastions and walls with rough lime-plaster facing that reminded Kevin of Albuquerque's fort at Malacca. The ruins are unprepossessing but the view over Hadibu Plain is panoramic: below us, palms crowded round a lagoon where a *wadi* met the sea; eastwards stretched a broad bay backed by dunes, while in the opposite direction were the little gable-ended thatched houses of Suq and, in the distance, the palms and houses of Hadibu; to the south, a thick cloud blanket was pierced by the Hajhir spires; in front of us lay the ocean.

It seemed incredible that this was just one of an immensely long chain of coastal and island forts stretching from Mozambique via Muscat and the Malabar Coast all the way to the East Indies—that, for a few decades, the Indian Ocean had been a Portuguese lake. Yet in the history of empires, this was one of the shortest-lived.

Following that abortive occupation by the Portuguese, Suqutra, on the whole, eluded the imperialist grasp—though never quite as spectacularly as when it vanished out of sight of the Ayyubid fleet. The Portuguese returned on and off but never stayed. The Omanis attacked half-heartedly in 1669, and the British tried it out as a coaling station before deciding on Aden, but their garrison succumbed to fever. The Suqutris of the interior, meanwhile, went on as before, collecting dragon's blood and aloes, and milking their goats. It was as if the Portuguese had been and gone and left nothing. Or had they? There were the legendary blue-eyed people of Shilhal. Or could they be an even older genetic throwback, connected with the claim of Cosmos and later writers that the island had been colonized by Greeks?



We hired another Salim, the owner of a battered green Landcruiser, to take us as far east as possible. We would finish the journey to Shilhal on foot.

There are no gas stations on Suqutra—you just knock on a door and fill a jerry can, if you're lucky. Gas is in short supply because of the difficulty of importing it, and costs up to five times the official rate in San'a; the cost of hiring a car is correspondingly high. After a lengthy tour of downtown Hadibu, we had a full tank.

An hour out of Hadibu, we were up on the high rolling moors, heading east under low cloud. Occasionally the cloud parted to light up a distant peak or hamlet, but at the village of Ifsir the rain set in, thick and wet. Here lived Salim's sister, so there was another caprine slaughter, another massive lunch of meat, rice and *rawbah*. From Ifsir to Kitab and Aryant the rain fell hard, turning the red road to mud and making the Landcruiser slip on the pass up to the higher plateau. But by the time we reached our destination, the village of Qadaminhuh, the rain had stopped. Kevin and I were dropped at a newly built house and wandered off into the sodden landscape while Salim went to find the owner.

Qadaminhuh is also known as Schools, from the big quadrangle of incongruous barrack-like buildings next to it. Here, a hundred or so weekly boarders live and study, boys from across this eastern region of Mumi. As we walked down the track towards the schools a fitful light broke through the cloud and a rainbow materialized.

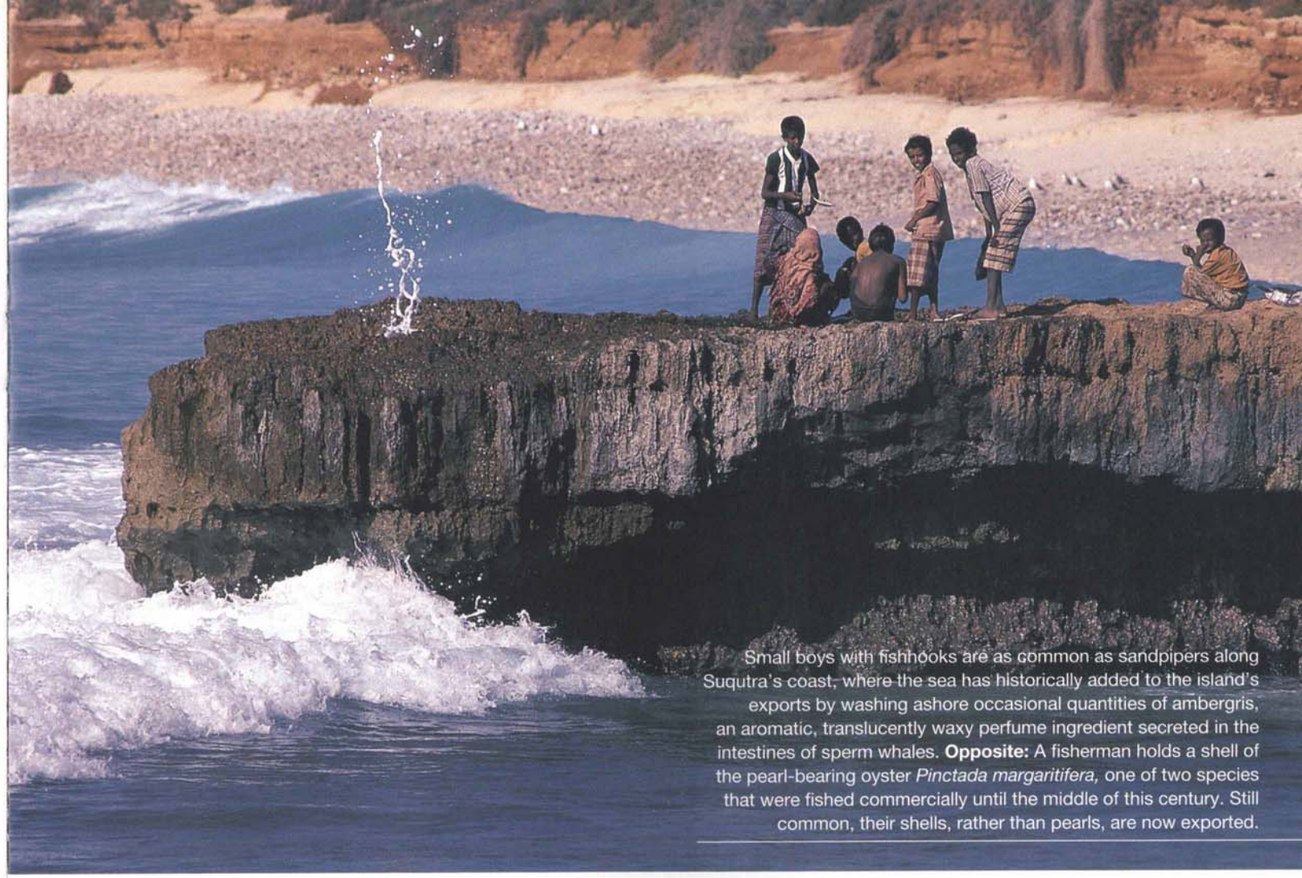
The place seemed deserted, but then a figure appeared from a doorway and headed towards us. He was dark-skinned and tall, clearly not a Suqutri, and before we could greet him he spread his arms in a wide sweep that took in the plain, the low surrounding hills and the rainbow, and said in rich and unaccented English, "Welcome to our…*humble* surroundings!"

Muhammad was an Adeni high-school graduate sent to do his obligatory teaching service on Suqutra. At first he had thought of it as a punishment posting. But up here in Mumi, he said, the scenery was so beautiful, the people so kind that you might imagine yourself in England. I agreed that even if the nearest country, in a direct line, was Somalia, you might be forgiven for thinking you were in northern Europe. "But in England you couldn't just turn up on someone's doorstep and stay for the night."

Sa'd, our host, expressed no surprise that two total strangers should be billeted on him. "It's our custom," he said simply. We asked Sa'd about the blue-eyed people of Shilhal; he, too, was skeptical, and spoke of the place—only a few miles away as the vulture flies—as if it might not have existed.

By seven the next morning we were high in the uplands under a lowering sky on the way to Shilhal. The going was hard, over sharp rocks dotted with tiny alpine flowers. Every so often we had to cross low walls of misshapen lichen-covered stones that were clearly very old: some authorities have taken them to be the ancient boundaries of incense plantations, but in fact they marked out claims allotted by the sultan for the harvesting of aloes.

We crossed a little dale, filled with basil and lemon-scented herbs, where we breakfasted on unripe tamarinds. The valley marked the beginning of cattle country, and up on the far top we passed a herd. Like their cousins in al-Mahrah and Dhofar, these were humpless beasts no bigger than a small donkey. Progress was slow, for at each hamlet we passed we were invited in for *rawbah*, and at lunchtime we joined an apparently never-ending feast in honor of a villager just returned from the Emirates. At the end of the valley the track climbed under a crag with walled caves at its base. Before us, a few houses in a hollow, was the village of the blue-eyes: Shilhal. It looked no different from the other villages of Mumi. It felt like the end of the world.



Small boys with fishhooks are as common as sandpipers along Suqutra's coast, where the sea has historically added to the island's exports by washing ashore occasional quantities of ambergris, an aromatic, translucently waxy perfume ingredient secreted in the intestines of sperm whales. **Opposite:** A fisherman holds a shell of the pearl-bearing oyster *Pinctada margaritifera*, one of two species that were fished commercially until the middle of this century. Still common, their shells, rather than pearls, are now exported.

KEVIN RUSHBY

"A year or two ago," said Thani, in whose guest-house the clan of Shilhal were gathered, "a foreign woman came here. She might have been French, or Russian. I don't know. Anyway, we were sitting round like this, talking about history, and she asked us: 'Do you think your grandfathers were oranges?'"

There were tears of laughter at the memory. Thani got out of a leather pouch what looked like a clay cigar holder, then a fragment of tobacco leaf which he placed for a moment on the lamp before crumbling it and putting it in the holder. When his match refused to light I handed him my disposable lighter; he looked at it with curiosity then, shaking his head, handed it back. A second match worked. He took a single long drag then went on. "Then she said, 'I mean the people, not the fruit.' You see, 'oranges' and 'Portuguese' sound similar in Arabic."

"So what do you think—have you got any Portuguese blood?" I asked. In build the people of Shilhal looked the same as the other mountain Suqutris we had met; but a few of them did have fairer skin, and there were undeniably striking eyes that ranged between green and light hazel. Striking enough, anyway, for reports of them to circulate and become embroidered.

A man who had so far been silent, a dashing figure, bare-chested with a shawl thrown round his neck; replied. "They say that we, the real Suqutris, have two ancestors. One lived here in Mumi and the other at the western end of the island. In time, people came in from outside and married with their descendants."

I remembered the claim later, when reading an analysis by the Russian scholar Vitaly Naumkin of Suqutri palm-prints and teeth. He was able to come to few firm conclusions about the islanders' origins, other than saying that they are a mixture. However, he goes on, the inhabitants of the western and eastern highlands are both "mutually similar" and markedly different from other groups. Linguistically, he puts forward the hypothesis that Suqutri became isolated from the ancient South Arabian languages at some time between 1000 and 500 BC. This suggests a rough date for the settlement of the island by groups from the mainland.

It is probably true to say, then, that here, in these isolated communities on an isolated chunk of land, are the people whom another scholar called "the last real South Arabians." As for Portuguese forebears—if there ever were any in Shilhal—time has obliterated all memory of them.

Talk was reverting to Suqutri. I was interested to hear some Suqutri poetry and asked the Shilhalis if they knew any. It was the bare-chested man who answered again. "I have a little," he said, and chanted a haiku-length verse. It was received with sighs, then silence. I asked the man what the verse meant. He smiled. "Ah,

it's about love. But I only know the words, not the meaning. I'm not a *sha'ir*, a poet."

Then I remembered the root sense of the word *sha'ir:* not a reciter of verses or an arranger of words, but one who was endowed with insight, one who perceived. Suqutri poetry is a dense thicket of ellipsis and metaphor. It needed a perceiver to see the way through it.

The next morning was bright and cloudless. We made our way slowly upwards over a cracked limestone pavement. Near the top of the hill, a breeze began to buffet our faces. Then the ground vanished. A 600-meter (2000') cliff fell sheer to white sand, white surf, blue sea where a single speck of black, a *hawri,* hung in motionless suspense between the elements. To the right was the great dome of al-Jumjumah, the Skull, then the long promontory of Ra's Mumi, a haunt of sirens, a wrecker of ships, a scimitar cutting the ocean. *The last place in Yemen.*

I remember sitting above the village that afternoon under a westering sun. Light raked across ruddy earth and bald limestone, across the grassy roofs and drystone walls of Shilhal. They were bringing in the goats. Virgil described the scene at Shilhal in the *Eclogues:*

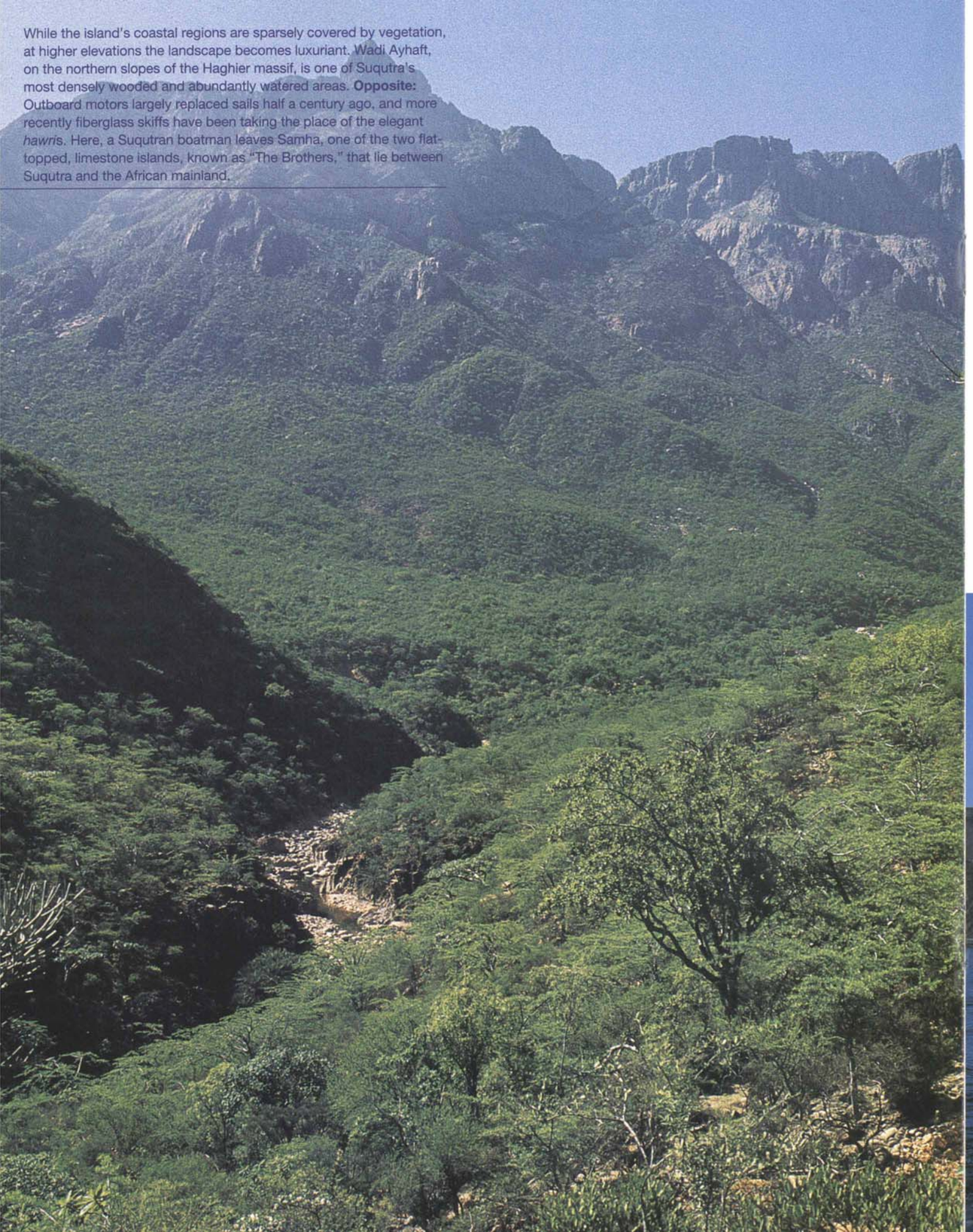
Ite domum saturae, venit Hesperus, ite capellae.
Go, my full-uddered goats, go home, for the Evening Star is rising.

And, in the *Georgics,* Suqutra itself appears as the incense land of Panchaea. Virgil inherited the name from the pharaonic Egyptians, whose Pa-anch was a utopian island ruled by the King of the Incense Land. The myth of the island paradise—from Pa-anch through Odysseus's land of the Phaeacians and Sindbad's fabulous isles, all the way to Bali Hai in *South Pacific*—is one of the most enduring in the world. Here, perhaps, at the end of Yemen, was its beginning.

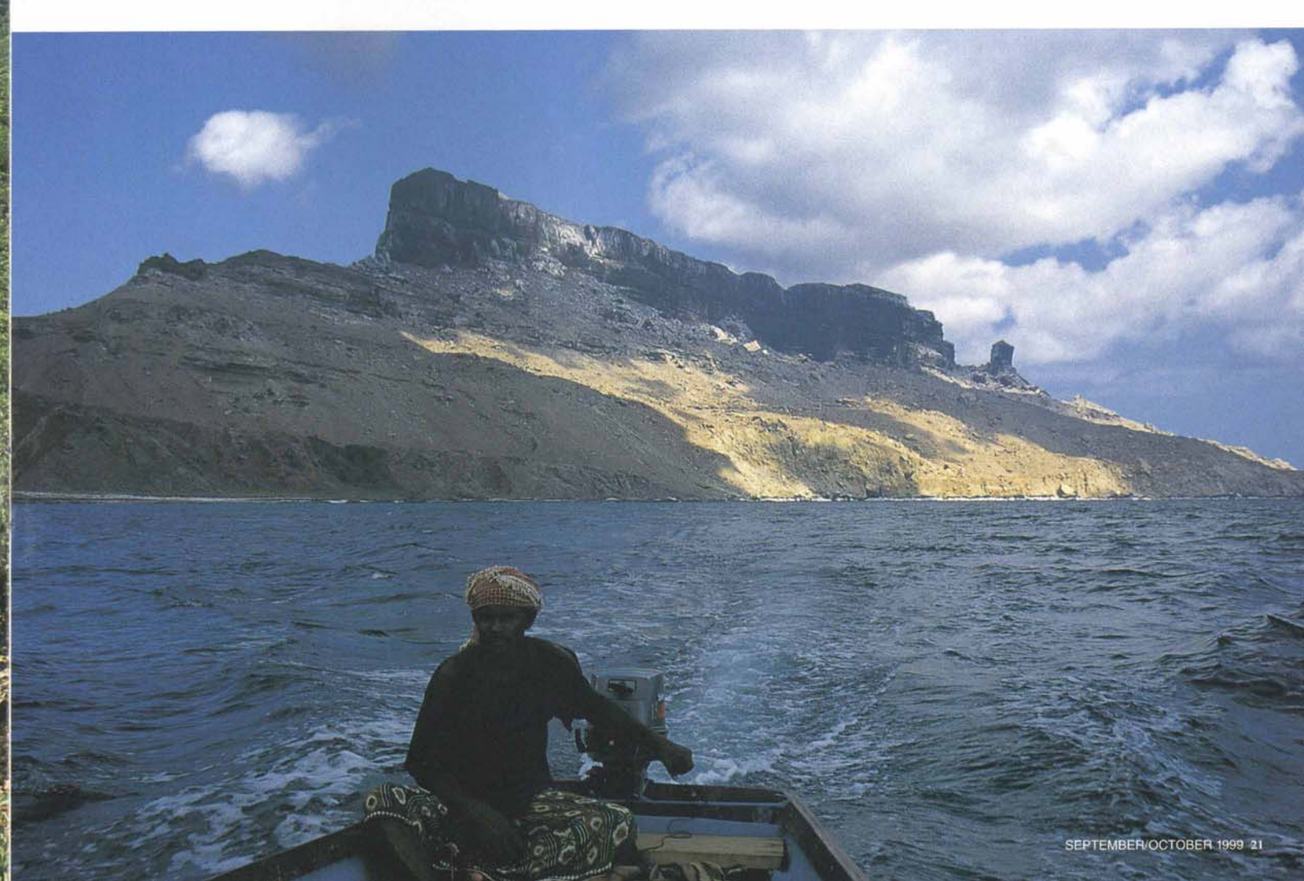
Tim Mackintosh-Smith was born in southern England and has lived in Yemen for 17 years. His book Yemen: Travels in Dictionary Land, *published by John Murray, won the Thomas Cook Travel Writing Award in 1998, and will be published in the United States by The Overlook Press (www.overlookpress.com). He is at work on a book about the travels of Ibn Battuta.*

Dr. Wolfgang Wranik is a marine biologist at the University of Rostock, Germany. He has taken part in several scientific expeditions to the island, and is the author of Sokotra: Mensch und Natur (Suqutra: Man and Nature) *published in 1999 by Ludwig Reichert Verlag Wiesbaden.*

Kevin Rushby taught English in Sudan, Malaysia and Yemen before becoming a full-time author and photographer. His first book, Eating the Flowers of Paradise, *was published this year by St. Martin's Press, and he is at work on a book about India. He lives in Yorkshire.*



While the island's coastal regions are sparsely covered by vegetation, at higher elevations the landscape becomes luxuriant. Wadi Ayhaft, on the northern slopes of the Haghier massif, is one of Suqutra's most densely wooded and abundantly watered areas. **Opposite:** Outboard motors largely replaced sails half a century ago, and more recently fiberglass skiffs have been taking the place of the elegant *hawris*. Here, a Suqutran boatman leaves Samha, one of the two flat-topped, limestone islands, known as "The Brothers," that lie between Suqutra and the African mainland.



History's New Home in RIYADH

Written by Trevor Boddy

Historic photographs of the Hajj, the Muslim pilgrimage to Makkah, line a curving corridor of Saudi Arabia's National Museum. Though the city has grown and the Great Mosque has been expanded many times in the 14-century history of the pilgrimage, scenes of personal devotion like those seen here are encountered afresh every year. ***Previous spread:*** *A façade shaped in the embracing curve of a barchan sand dune lends warmth to an exterior that is both dynamic and serene.*

In each period of architectural history, one type of building stands in historical memory as an emblem of time and place. In the late 1920's in North America, Art Deco office towers captured the optimism of unprecedented economic growth; in late 19th-century Europe, the train stations glorified industrial technologies and a new ethos of movement. In the late Middle Ages, cathedrals gave form to Europe's unity of religious faith and social organization; and in the Islamic world, congregational mosques epitomized the spirit and the esthetic that reigned and the unified faith that informed them.

Today, the burden of architecture's effort to express culture is borne most heavily by museums. Witness the astonishing popular and critical attention accorded recently both to Frank Gehry's Guggenheim Museum in Bilbao, Spain and Richard Meier's hilltop Getty Museum in Los Angeles. These are only the most recent cases of "celebrity museums": In major cities throughout the world, the opening of a new cultural or historical museum raises a degree of architectural expectation and invites a level of critical attention that are simply not generated by new offices, housing developments or government buildings.

These thoughts occupied me as I was driven through the boulevards and streets of Riyadh. It was my first day in the country, and I had come as an architectural correspondent for a Canadian newspaper and magazine on the occasion of the opening of the National Museum of Saudi Arabia, timed to coincide with the *hijri* centennial of the founding of the modern Saudi state, the recapture of Riyadh by 'Abd al-'Aziz ibn 'Abd al-Rahman Al Sa'ud. (See *Aramco World*, January/February 1999.) It was one of the few times in a two-decade career as a design critic that I was about to visit a building without first having seen photographs of it. As I sped by office buildings, apartments, hospitals, shopping centers and government complexes, it was instantly clear to me that contemporary architecture plays an unusually powerful role in urban Saudi life—if only because, in a city so extensively enlarged and rebuilt in the past three decades, there is simply so much of it.

We approached the National Museum from the rear, where a parking lot is shaded by translucent fabrics in a technique reminiscent of the award-winning Hajj Terminal at the Jiddah airport. (See *Aramco World*, July/August 1981.) Rising above the museum's rectangular, ochre-brown massings of locally quarried limestone protruded a wide cylinder. I walked around toward the front, which faces the plaza of the King 'Abd al-'Aziz Historical Center and, across it, the equally new Darat al-Malik 'Abd al-'Aziz (King 'Abd al-'Aziz Foundation for Research and Archives) and the renovated Murabba' Palace. I noticed that, up close, the limestone had distinctive, faint swirls of brown, cream and orange, and its exceptionally warm texture was as pleasing to the hand as it was to the eye. I followed a wall of this stone to my left into the tall, narrow, canyon-like passageway that offers visitors a shaded and breezy path behind the high, curving façade that is the museum's most distinctive feature. This walkway of finished limestone, with its cooling breeze and dramatic, rhythmic shadows cast by a lattice of wooden beams above, made an enticing entry.

But before entering, I first walked out into the plaza and the landscaped Gardens of Riyadh nearby, filled with newly planted trees. On the other side is Darat al-Malik 'Abd al-'Aziz, the simultaneously constructed new museum center dedicated to the life and memory of the king. A companion institution to the National Museum, it was designed by Jordanian architect Rasem Badran, who also built the Qasr al-Hokm complex in the historic heart of downtown. (See *Aramco World*, January/February 1999.) Unlike the National Museum, Darat al-Malik 'Abd al-'Aziz uses a contemporary updating of the traditional decorative detail used in central Saudi Arabian (Najdi) mud-brick construction. I realized that I had expected to see something akin to this on the National Museum, considering that its mandate is to interpret the range of Saudi cultural history to its citizens and international guests.

But as I turned and looked back onto the full, sweeping façade of the National Museum, I realized that its architectural vocabulary included neither the allusions to historical buildings nor the polished, high-tech decorative pastiche that characterize Darat al-Malik 'Abd al-'Aziz. Rather, the façade has simplicity and quiet authority. Its long, asymptotic curve is rendered with an almost casual naturalism, at once an accelerating, kinetic gesture and one that conveys a gentleness, despite its scale. Together with the cylindrical exhibit hall—the "Unification Drum"—rising from the flat roof, the curve lends the museum touches that seem almost paternal.

Even from the outside, the façade curve helps the museum project serenity, implying that inside is a respite from visual hyperactivity, such as is found in Darat al-Malik 'Abd al-'Aziz and, more important, in the pulsing city beyond. The building is not an overtly ambitious form, but a timeless one, appropriate for an institution whose projected lifespan is some 300 years, and which is charged with interpreting all eras of Saudi history. As I looked at the curve more closely, there was something familiar about its elegantly tapering form, but I could not find the metaphor that seemed right. As it turned out, I would have to wait for several days, and take a trip into the desert with the building's architects, to understand the source of the form.

PREVIOUS SPREAD: AJON MORIYAMA / MORIYAMA & TESHIMA

OPPOSITE AND RIGHT: MOHAMED S. ALSHABEEB / SHABEEB & PARTNER; TOP: AJON MORIYAMA / MORIYAMA & TESHIMA

Inside the National Museum, the same understated qualities prevail, making the museum a building that is both dignified and approachable, theatrical and intimate—a respectable feat for a structure that covers 3.6 hectares (9 acres). In the lobby, the polished granite floor doubles as Riyadh's first indoor urban square—it will be open 24 hours a day, even when museum exhibits are closed—and as a *musalla*, or prayer space, for special occasions. From the high ceiling, colorful banners fall in serried ranks, softening and pacing the space, helping give it human scale while announcing the exhibit themes. Leading off the lobby are the two main exhibition wings, devoted respectively to history before and after Islam. Each is built around a courtyard oasis of water and foliage.

The first begins with the geology and natural history of the Arabian Peninsula, and moves through galleries varied in shape, size and lighting qualities to displays that cover early settlements, trade routes, art and crafts, and the patterns of daily life from prehistoric times to the early seventh century. It is immediately apparent that, unlike in other museums in the Middle East—Cairo comes first to mind—the emphasis here is not so much on displaying objects as it is on education: Explanations in both Arabic and English are well-written and abundant, and they are clustered in ways that help make complex histories accessible to general audiences.

Dividing the two wings is one of the museum's architectural set-pieces, which starts with a dark, winding tunnel representing *al-jahiliyah*, the "age of ignorance" that preceded Islam. It leads to an escalator that carries visitors up to a brilliantly day-lit landing with white walls, evoking the ascent into the spiritual illumination of Islam. This in turn opens into an equally brightly lit but sparsely appointed room in whose center is a single, glass-encased, handwritten copy of the Qur'an. The

In the history of Saudi Arabia, the Hijrah—the flight of the Prophet Muhammad from Makkah to Madinah in 622—is fundamental. It is thus built into the very plan of the museum, which is divided into pre-Islamic and Islamic sections linked by a passageway that marks the beginning of the Islamic era. ***Below:*** *The first of the museum's nine major galleries is devoted to the physical geography of the Arabian Peninsula and its early human settlement. Throughout, the emphasis is more on education than on artifacts, and all narratives are in Arabic and English.*

MOHAMED S. ALSHABEEB / SHABEEB & PARTNER; OPPOSITE: AJON MORIYAMA / MORIYAMA & TESHIMA

emphasis here, again, is not on this particular manuscript as an antique exemplar of a particular artistic school, as one might find in a Western museum. Rather, it is on this single Book as a symbol of the great historical event of the revelation of the Word of God through the Prophet Muhammad.

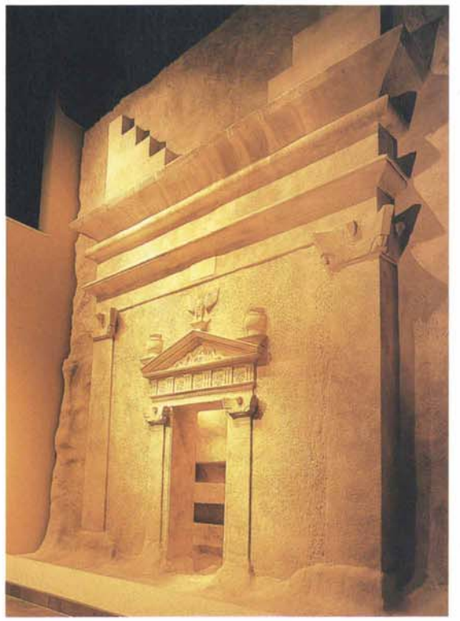
This room leads to a bridge, some 40 meters (130') long, that links the pre-Islamic to the Islamic-era wing. A contemporary ceramic mural enhances the right wall, and faint music with children's voices is piped in to the far end, which grew louder as I walked. The effect is strongly emotional, and it is symbolic of the Prophet's flight to Yathrib (Madinah), known as the Hijrah, which marks the beginning of the Islamic polity.

"The story of the Hijrah is fundamental; it is in the very plan of the museum," says Abdulrahman al-Sari, an architect and a senior official of the Riyadh Development Authority, which guided the museum's construction. "It gives us an opportunity to explain to the world the unity of religious and political views in our history." Fittingly, the hallway ends in a large gallery dedicated to the history of the Muslim pilgrimage, or Hajj, and of the two holy mosques in Makkah and Madinah, whose maintenance and support, for use by Muslims from around the world, is a supreme responsibility of the Saudi state.

Like the first wing, the Islamic wing also takes pains to cover not only "official" periods of history as defined by political events, but also everyday concerns of trade, food, clothing, shelter, crafts and folk art. Leading up to the "Unification Drum" are façade recreations of vernacular architectural styles from each of Saudi Arabia's four key areas—Hijaz, 'Asir, Najd and the Eastern Province. Each is animated with displays of traditional arts and crafts, making this one of the most visually lively exhibits. Inside the Unification Drum, architecture, photographs, text panels, banners and a multi-media video/laser show highlight the founding of modern Saudi Arabia.

Several days after my tour of the museum, I joined the museum's lead architect, Raymond Moriyama, on a sunrise trip to the red dunes west of Riyadh. Our path retraced a trip he had made a bit more than two years earlier, shortly after he received the commission to design the museum. Moriyama, now nearly 70 years old, squatted near the ridge of a dune. We watched as the wind blew sinuous, shifting ripples into the light-raked sand. He turned to me and asked, "Do you see now where we got the idea for the museum?"

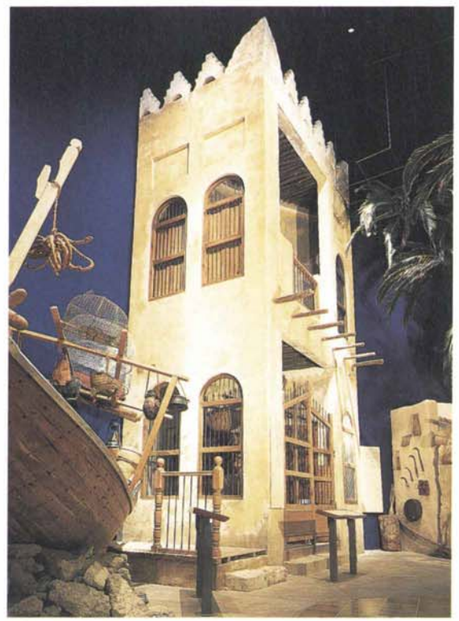
This kind of naturalistic acumen is typical of Moriyama, who over four decades has earned a reputation in Canada as a disarmingly low-key designer of fine, often underappreciated, buildings. Yet as we neared the top of the largest dune, Moriyama talked not of the museum, nor even of the magnificent landscape around us, but rather of his boyhood experiences during World War II, when following the Japanese attack on Pearl Harbor, his family's Vancouver home and hardware store were confiscated by the Canadian government and he and his relatives, with other Japanese-Canadians, were shipped to an internment camp. With his father in a different camp, it fell to Raymond, the 13-year-old eldest son, to support his mother and siblings with hard labor at five cents an hour. His architectural career began in that wilderness camp, he says, when he built a bathhouse-*cum*-treehouse as a personal refuge.



These early challenges, he believes, gave him a strong character coupled with sensitivity, qualities that have come through in his architecture. His first major commission was the 1958 Toronto Japanese Cultural Centre, a boldly modernist concrete pavilion in a ravine, which has come to be recognized as one of the city's best buildings of that decade. His 1969 Scarborough [Ontario] Civic Centre integrated government offices, library, commercial functions and a generous indoor plaza, and inspired countless similar suburban civic buildings in Canada and the United States. A few years later came the Ontario Science Centre, one of the first "hands-on" science museums. In 1995, his Bata Shoe Museum won a City of Toronto Urban Design Award. By late 1996, his record was such that the visiting Saudi delegation included the firm of Moriyama & Teshima Architects among the four invited to compete for the National Museum commission.

As effective as the National Museum is today, I was astonished to learn that the museum building, collections and displays had been created from scratch over a mere 26 months, working constantly to the deadline of the January 1999 centennial celebration. This pace compares to the 12 years it took to build the late British architect James Stirling's Stuttgart Staatsgalerie, which is credited with starting the current boom of architecturally ambitious museums with its completion in 1984. Meier's Getty Museum took nearly as long. Many additions to existing museums take more than 26

Exhibits featuring full-scale replication allow the museum to give visitors a three-dimensional understanding of Saudi Arabia's historic architecture without removing original works from their sites. Nabataean rock-cut tombs like this replica are found in Madain Salih and other locations in the northwest of the country. ***Opposite:*** *Raymond Moriyama's characteristic architectural understatement, with clean lines and uncluttered walls, keeps visitors' attention focused on the content of the museum rather than the building itself.*



The ways of life and the distinctive architecture of the four major regions of Saudi Arabia—the Red Sea coast, the mountains of 'Asir, the central deserts and oases of Najd, and the Eastern Province—are presented at the entrance of the museum's "Unification Drum," devoted to the creation of modern Saudi Arabia by 'Abd al-'Aziz Al Sa'ud. The display ***above*** *represents the Red Sea coastal region, with tools used in date-palm cultivation;* ***below*** *is a boat from that region carrying wire fish-traps, and the stone architecture of 'Asir.*

months to design and build, never mind creating an entirely new institution with neither pre-existing staff nor collections.

Yet the project had its genesis, in concept at least, as early as 1983, when urban planners at the Riyadh Development Authority (RDA) were considering how to make more public the area about the Murabba' Palace, which had been built in mud brick in 1932 for King 'Abd al-'Aziz. By 1989, the RDA produced outline plans for a "cultural precinct" east and south of the palace that would offer, among other things, a library, public gardens, a rebuilding of Darat al-Malik 'Abd al-'Aziz and a museum. The RDA had previously overseen the construction of Riyadh's Diplomatic Quarter (see *Aramco World*, September/October 1988), and numerous other planning and construction efforts throughout the capital. Although the 1991 Gulf War slowed down its work, by 1994 the cultural precinct had been re-named the "King 'Abd al-'Aziz Historical Center" and, with the centennial only five years away, the RDA was committed to providing the city with the best possible gardens and civic spaces along with the buildings planned.

"The concept of the integrated green areas evolved with the rest of the project," says al-Sari, "and they are essential in order to integrate this complex into the daily life of the city."

With pre-design studies complete, an RDA-sponsored team made technical tours of many of the world's finest museums constructed over the past two decades. From the list of potential designers, four were selected: New York-based SITE ("Sculpture in the Environment"), designers of the Saudi Arabian pavilion at the Seville world's fair; Hellmuth, Obata + Kassabaum, designers of King Saud University in Riyadh; Richard Meier & Partners, designer of the Getty Museum and the Museum of Contemporary Art in Barcelona; and—the least known—Toronto-based Moriyama & Teshima.

The challenge the RDA put to the architects was "to establish the complex as a cultural focus for the whole nation, and to make it a vibrant part of the urban fabric of the center of the capital," creating a sense of continuity and dignity for all Saudis.

According to senior RDA manager Ibrahim al-Sultan, Moriyama won the museum commission "because he is very sensitive to cultural difference. We actually found his approach quite similar to our own."

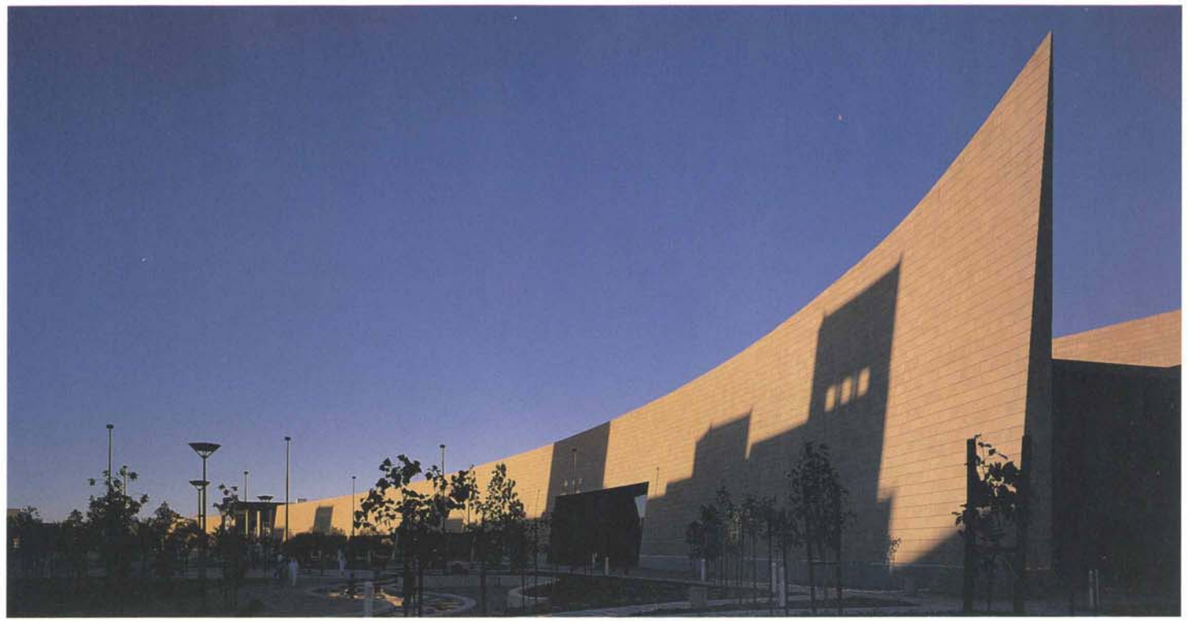
Riyadh-based Omrania Associates acted as local associate under the auspices of one of the Kingdom's most internationally recognized architects, Ali Shuaibi, whose previous work includes the Tuwaiq Palace, winner of a 1998 Aga Khan Award. A few weeks after the announcement, Moriyama made his first excursion into the red desert, returning with his color palette and textures, and with the idea of the museum's signature image, the dune-shaped façade.

In its finished form, the National Museum is proving remarkable for two qualities seldom found in contemporary museum design: modesty and flexibility. Saudi planners had decided early on that splashy architecture was not for them, nor did they want an interior scheme along the lines of the Bilbao Guggenheim, which has individualized its room designs according to the key artists whose work will be displayed in them. As a new institution, the Saudi museum is designed to accommodate change over time, particularly as archeological research continues and cultural historians provide ever-clearer accounts of Arabian life in ancient times. In addition, the fast-track design and construction cycle meant that foundations were being poured before final decisions had been made about the functions of the galleries above them. With the collection of artifacts also only then beginning, the galleries had to be designed for as-yet-unknown displays.

"The new museum's collection of actual artifacts was not rich enough to make for a full interpretation of Saudi history" based on artifacts alone, explains Anthony Reich of Reich + Petch Design International, who served as senior display designer. This challenge, he said, led the team toward the construction of architectural and archeological replicas that would accomplish the didactic goals of the institution. Thus the austerity of the National Museum's own architecture actually opens the structure for a visually rich approach to the installations within. Considering the number of historic

TOP: MOHAMED S. ALSHABEEB / SHABEEB & PARTNER; LOWER: REICH + PETCH DESIGN INTERNATIONAL

AJON MORIYAMA / MORIYAMA & TESHIMA



replica displays, there is in a sense more architecture inside the museum than out—and the learning-oriented institution is richer for it. Reich points out that his display regimen lends itself well to enrichment with new artifacts as they are discovered, and indeed the current installation at times evokes the spirit of a world's fair pavilion more than that of a traditional glass-cases-and-labels museum. Yet today, even in the most scholarly of international museums, this populist approach is slowly winning favor, as curators learn that it can actually enhance a museum's educational mission by increasing the institution's appeal to diverse publics.

In this spirit, some of the most effective displays in the museum are not even replicas, but interactive, bilingual computer screens and large-screen video installations. These take simulation and replication to a further level of abstraction with well-animated, seemingly three-dimensional computer graphics showing how Arabs of prior epochs farmed, transported, housed, fed and amused themselves, all in engaging detail based on new research by Saudi scholars and the kingdom's Department of Archeology. With their combination of visual power and informative detail, they make for some of the most intellectually and emotionally engaging displays in the museum.

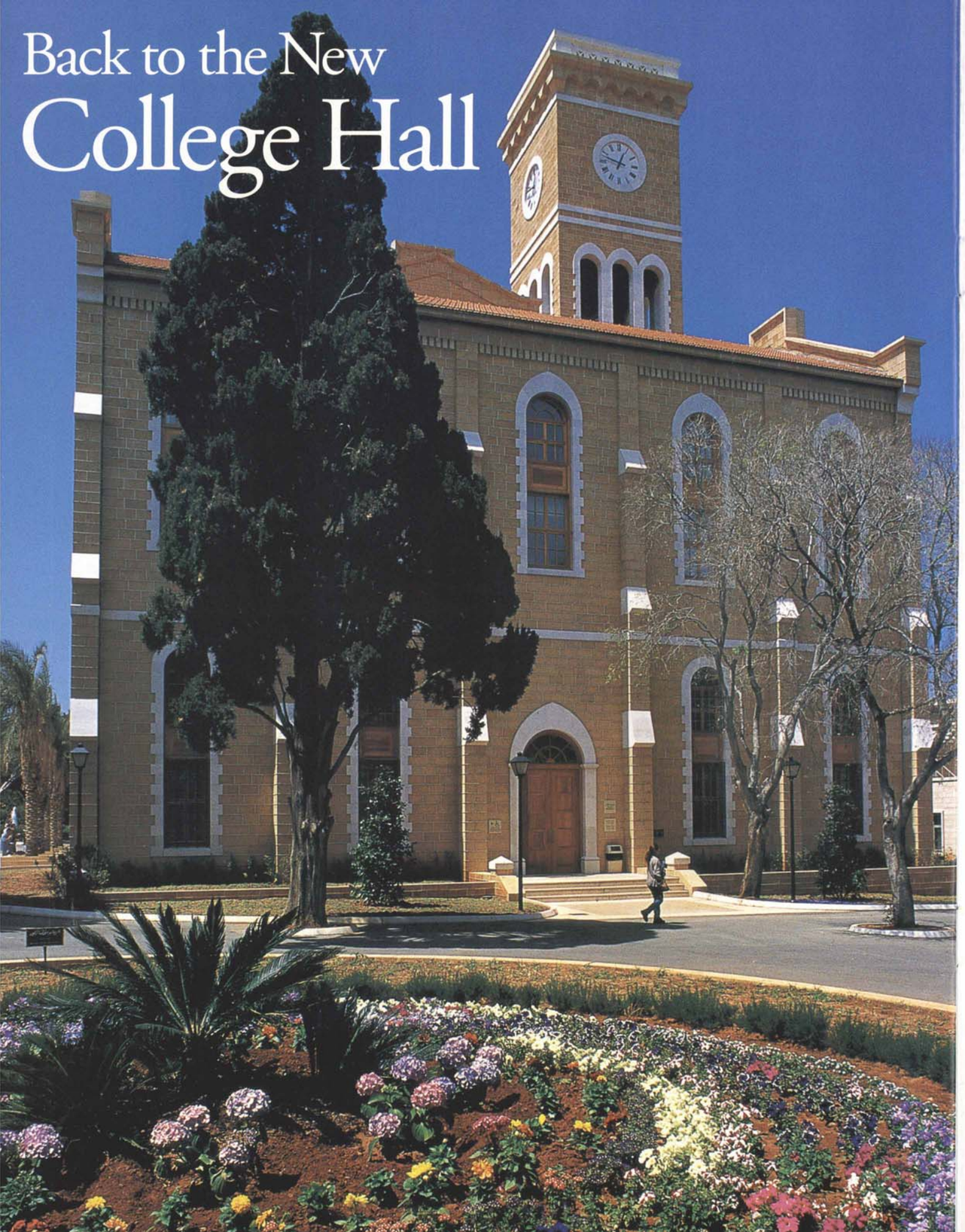
Organizers of course hope that as the museum leaves images and stories in the minds of its visitors —particularly young Saudi visitors—it will help increase domestic tourism. The low-key architectural approach ultimately helps the displays do what an educational museum should do: Stimulate interest in the real locations and events they denote. For visitors from abroad, there is now a place to spend a few comfortable hours and gain a rich, comprehensive understanding of Saudi Arabia and Islam, all in an architectural setting that, while pleasing, does not overwhelm the significance of its contents. As I prepared to return to Canada, I realized that, thanks to the museum, I had a new desire to see the rest of the country—but that would have to wait for another assignment.

On my last evening in Riyadh, I visited the museum at sunset, and I found then a visual dimension to the design that I had not noticed: As the deeply orange sun projected the silhouettes of the towers of Darat al-Malik 'Abd al-'Aziz onto the museum's curving, dune-like façade, it was as if a shadow-play had come to life: Tiny moving silhouettes of Saudi visitors moved among the towers, some pausing to gesture at their own images on the Museum. This ephemeral blending of past and present was to me the seal of success on Moriyama's design: On a form drawn from the desert, re-made in contemporary technology, lay the shadows of the past, animated by the present.

Trevor Boddy, an internationally published Canadian writer on architecture and culture, has taught at architecture schools across the continent. He is the author of The Architecture of Douglas Cardinal *and of* Picturesque, Tectonic, Romantic: The Houses of Helliwell + Smith.

The shadows of the traditionally designed towers of the Darat al-Malik 'Abd al-'Aziz museum and research center fall on the façade of the National Museum, aptly symbolizing the continuing influence of Saudi Arabia's first king on the nation he unified.

Back to the New College Hall



DENISE NASSER

"Here it will rise in commanding proportions...and, like a city set on a hill, or as the lighthouse at the entrance to your harbor, it will be one of the first objects which will meet the eye of the stranger entering your port."

William E. Dodge, AUB Board of Trustees,
laying the cornerstone of College Hall on December 7, 1871

WRITTEN BY MAY FARAH • PHOTOGRAPHED BY DICK DOUGHTY

It came on a quiet night, and West Beirut residents will never forget the blast. Though they were no strangers to the nocturnal crackle of gunfire and the chilling thuds of intra-urban shelling, this was November 8, 1991, and the Lebanese civil war lay more than a year in the past. Or did it?

The explosion rocked sea-view apartments and shattered glass throughout well-heeled West Beirut. Two buildings lay ruined—the library of the American University of Beirut (AUB), and College Hall, the venerable original edifice of the university, whose bell tower had tolled dependably throughout 15 years of war. The time on the crushed, fallen clock face read 3:45 a.m., the moment a truck loaded with an estimated 100 kilograms (220 lb) of explosives was detonated, for motives still unknown. One university employee, 49-year-old Munir Salha, an offset printer and father of four, was killed. Beyond this, the damage to the spirit of the university, and the city at large, was vast.

"For more than a hundred years people had looked up at that clock," says Denise Nasser, an AUB graduate who was visiting family in West Beirut at the time. "It was one of the only symbols of stability we had left. It told us the time throughout the war. When I heard that College Hall was gone I almost collapsed myself. We were crying, we were all crying, some of us even more than for things during the war itself. On the campus you could see professors, students, everybody was weeping, just stunned by this."

Hiba Darrous was just one block from the campus, asleep in her family's 11th-floor apartment. She remembers "being startled out of bed by the loudest boom I'd ever heard. I rushed to the living room to look out the bay windows but they weren't there. The explosion had shattered all the glass, which lay in heaps across the floor."

"It was a time of sadness and disbelief," said AUB president John Waterbury this year of the 1991 bombing. But the day after the tragedy, Elias Hrawi, then president of Lebanon, visited the campus and made the first donation toward reconstruction. Dedicated in June, the new building, opposite, maintains the appearance of the original. Top: The cedar tree, symbol of Lebanon and of AUB, is etched into brass medallions that appear in the new College Hall.

College Hall was not only the oldest building on the AUB campus. Located in front of the main gatehouse along Bliss Street, it was the foremost symbol of a university that had bravely kept its doors open throughout the war, even though nearly every other educational institution in Lebanon had shut down. The four-sided

clock tower, rising from the hilltop campus to overlook the city's most popular promenade, the seaside Corniche, was very nearly a national symbol. Within days of the bombing, letters of outrage—and pledges to support reconstruction—began to pour in from alumni and friends.

As a result, says Nazih Zeidan, director of AUB's Office of development, "the decision to rebuild College Hall was taken almost immediately." Fundraising committees quickly coalesced in Beirut and around the world.

"The campaign 'Let's Rebuild College Hall' was successful because of people's sentimental attachment to both the building and the campus," Zeidan explains.

From London and other branches of the alumni association throughout the United Kingdom came the most generous collection of private donations from a single country —some $3 million—enough to cover about 15 percent of the new building's eventual $20 million price tag. Hisham Solh, chairman of the board of the London branch, explains that his group's fund raising began while it was planning a convention to celebrate AUB's 125th anniversary. The guest list for the November 30, 1991 extravaganza included AUB alumni and friends from around the world, among them Queen Noor of Jordan.

"When College Hall got blown up three weeks before the celebration, the committee quickly agreed that we would dedicate that evening to its rebuilding," says Solh. As a result, "on the first day we raised £120,000," and from then on, "it was a priority project."

In Ottawa, Canada, the secretary of that city's alumni association, Bassam Zarkout, says that feeling was no less strong there, where College Hall reconstruction was "a constant sentimental favorite" when it came to the college's overall fundraising effort.

"When former AUB President Robert Haddad gave an address here," he recalls, "raising funds for College Hall was close to the top of his agenda."

AUB's more than 30,000 living alumni and alumnae have long demonstrated more than an average loyalty to their alma mater. (See *Aramco World*, January/February 1991.) "AUB has graduated presidents, members of Parliament, academics, and international business leaders," explains Yasmine Karanouh, who herself graduated in 1981. "We need the sense of identity and leadership that AUB provides."

*Top: The bell that rang the hours unsilenced throughout the 15-year Lebanese civil war was undamaged by its 1991 fall. Re-hung in College Hall's new clock tower, it now watches over the city's ongoing reconstruction. **Above:** The traditional exterior belies the new College Hall's interior difference: A 20-percent enlargement of the building and the inconspicuous addition of three floors—two below ground—has nearly tripled the building's floor space.*

Now, thanks to efforts of devoted alumni worldwide, the dream of rebuilding College Hall has come true. On another quiet night earlier this year, attention turned again to the clock tower as the spotlights that illuminate its new face—a replica of the old—were turned on. There was applause, and a few more tears—this time tears of relief and hope.

With its red-tiled roof, its light yellow limestone façade and colonnades with peaked arches; with its small windows and classical proportions, the new College Hall resembles the old. The library, which was also partly destroyed by the bombing, has been renovated and is now open beside College Hall, separated from it by a new fountain that splashes in a small plaza almost exactly where the bomb detonated.

"The alumni and the friends of AUB wanted the new College Hall to look like the old one, to have the same character," says Zeidan.

True enough outside, most agree, but inside, there was little attempt to replicate the old: Airy, high-ceilinged classrooms, the rambling library and the suite-like former dormitory of the 19th-century building have all yielded to the demands of present-day efficiency. The new building is 20 percent wider and taller, and it has one extra floor above ground and two new basement levels, giving it nearly three times the floor space of the original. Artistic and design touches are modest and tasteful: indirectly lit, vaulted hallways; a mosaic-floored entry foyer and, set in the interstices of the grillwork along the stairway, intaglio brass medallions featuring a cedar tree, symbol of both the university and Lebanon. Plaques at the entrance recognize the alumni and friends who made reconstruction possible, and several rooms will be named for major donors.

Centerpiece of the 28 hectare (73-acre) hilltop campus that serves some 5300 students, College Hall's clock tower overlooks Beirut's north-side promenade, the Corniche, where a bicycle-mounted peddler sells bread.

AUB's vice president of administration, George Tomey, who oversaw the moving of academic and administrative offices into the new College Hall, calls it "a modern building with all the modern facilities," with Internet connections in every room, ID-card-controlled access and a new audio-visual presentation room. Most important, it offers space sufficient for the university's present-day administration. "It took a lot of effort and a lot of tedious work, but it has been built to what we think are the highest standards of construction," Tomey says.

Although AUB officially opened on December 3, 1866 as Syrian Protestant College, it was with the hoisting of the bell into College Hall's clock tower eight years later that the institution became, in the words of founder Daniel Bliss, "a real college community." The bell had been cast in Troy, New York, and it tolled faithfully until 1962, when a crack forced its replacement. The 450-kilogram (990-lb) replacement was designed and cast by students in AUB's own engineering school.

They did their work well: Incredibly, the bell survived its fall from the tower during the 1991 bombing. Today, it still reverberates hourly throughout the campus and surrounding neighborhoods.

Some of today's students were as young as 11 years old when College Hall was bombed, and so the emotion of reconstruction often runs deeper among the university's faculty and staff.

Annie Kasbarian, a secretary to the president who has been with AUB since 1977, says she is "both happy and anxious" about her recent move back into the building. "The last few years, we have been working from here and there and it was like having no home," she says. But College Hall, old or new, "gives you a sense that you belong there."

On June 22, AUB celebrated that sense of belonging with a formal inauguration. Candles in hand, the 65-strong AUB choir led a crowd of some 500 alumni, students, faculty and friends in the university's song.

"We salute this evening all those, great and small, who contributed to the reconstruction," said AUB President John Waterbury. In a highlight of the ceremony, he invited onto the stage the family of Munir Salha, the employee killed by the explosion, to unveil a plaque that commemorates his death.

The ceremony closed with the replacing of the original cornerstone box, a shoebox-sized, lead-lined vessel first laid in the northeast corner of College Hall in 1871, but forgotten until it was rediscovered during excavation work in 1992. Now it contains both the newspapers, pamphlets and speeches from 1871 as well as memorabilia from 1999: a CD-ROM recording AUB's website and roster of students, faculty and staff; a current curriculum bulletin and, perhaps most fittingly, a printed program from that evening's ceremony reopening the building that Waterbury called "a beacon to all Beirut."

May Farah is a reporter for the Beirut Daily Star. *She grew up in Canada and holds a master's degree in sociology from AUB. Dick Doughty is the assistant editor of* Aramco World.

TRADERS OF THE PLAIN

Dr. Mohammad Rafique Mughal leans back in a squeaky rattan armchair at Falletti's, the once-grand colonial hotel in Lahore where British barrister Sir Cyril Radcliffe sweated under a ceiling fan during the muggy hot summer of 1947, drawing up the borders of a new Pakistan. The dry smell of dust raised by a sweeper outside mingles with the scents of cumin and coriander from the hotel kitchen. Mughal reminisces about his early days searching for archeological sites in the dry hills of Cholistan near that very border, across from what is now the Indian Punjab.

"Cholistan was a natural opportunity," says Pakistan's retired director-general of archaeology and museums. "Because of changes in river courses, the area had been undisturbed by agriculture for millennia."

Recently published as *Ancient Cholistan: Archaeology and Architecture* (Rawalpindi, Ferozsons, ISBN 9-690-01350-5), the account of his team's exhaustive three-year exploration of that desert region in the early 1970's revealed a telling pattern of abandoned settlements. The locations of the sites they found strongly suggested that the Hakra River, a tributary of the Indus, had changed its course many times before it eventually dried up about 4000 years ago. When it disappeared, it took with it most of the social and economic fabric of one of the world's greatest and oldest, but least-known, civilizations, today called the Harappan or Indus Valley civilization.

Evidence uncovered to date delineates a peaceful, artistic, disciplined and materially successful civilization that arose in the fertile Indus River floodplain of present-day Pakistan late in the fourth millennium BC, contemporary with the Mesopotamian civilizations of the Tigris and Euphrates River valleys—with which the Harappans traded extensively. The Harappan culture dominated the subcontinent for almost a thousand years before it mysteriously disappeared, leaving behind few direct traces of what happened, or where its large population went.

WRITTEN BY GRAHAM CHANDLER

A 46-mm (nearly 2") terracotta tablet from Mohenjo-Daro shows a shallow-draft river boat with two steering oars, similar to ferries used today. ***Opposite:*** *One of the larger sculptures found is this steatite "priest-king" 17.5 cm (nearly 7") tall.* ***Above:*** *On the seals found in the Indus Valley, the most common motif is the "unicorn" (second from left). Others depict a group of animals, a three-headed bull-unicorn-antelope, an elephant and a zebu bull.*

At its height, archeologists believe, the Indus civilization included more than a thousand villages, towns and cities scattered throughout 725,000 square kilometers (280,000 sq mi) of territory—an area larger than Texas and smaller than Turkey—that stretched from what is now northern Afghanistan south to Gujarat in India and as far west as the headwaters of the Ganges River. The Harappan domain was twice the size of the Egyptian or Mesopotamian territory of the time, yet the Harappans appear to have had neither conquering emperors nor standing armies to enlarge or defend their homeland. As far as archeological evidence shows, they enjoyed excellent health and freedom from both violence and extremes of wealth or poverty. They developed one of the earliest written languages and built some of the world's first planned cities, complete with individual household water supplies and sophisticated public drainage systems. And, as highly skilled craftspeople and enterprising merchants, they were one of the first major mercantile civilizations to trade far beyond the borders of their own territories.

Yet, though everyone has heard of the great civilizations of the Middle East, most of the world has never heard of the Harappans. "They didn't leave behind grand temples and monuments or rich burials that fired people's imaginations, as the Egyptians did," says Mughal. "Rather, they seem to have been utterly content with their egalitarian, religious society, with its high standard of order and ethics, and kept themselves busy with agriculture, craft production and trade."

The civilization's first discovery by modern Europeans was in 1826 at the site of ancient Harappa, near the modern village of the same name, in the Punjab of British India. The discoverer was a deserter from the British Army named James Lewis. The newly formed Archaeological Survey of India undertook initial excavations between 1856 and 1872, but intensive work didn't get underway until the 1920's and 30's. The discovery of this unknown ancient civilization was announced to the world in *The Illustrated London News* of September 20, 1924.

UNLIKE MOST CITIES OF THE ANCIENT WORLD, WHOSE WINDING STREETS AND RANDOMLY PLACED BUILDINGS SUGGEST HAPHAZARD GROWTH, ALL HARAPPAN MUNICIPALITIES EXPANDED BY DESIGN—INDEED, BY THE SAME DESIGN.

Large-scale digs teeming with hundreds of turbaned local workers, hot dusty scenes worthy of an Indiana Jones production, were the order of those days. Work focused on what are still the two largest sites, Harappa and, 600 kilometers (375 mi) to the southwest, Mohenjo-Daro. Though this century's high water tables have prevented researchers at Mohenjo-Daro from digging down to the lower levels that might put a date to the site's beginnings, their excavations soon revealed well-planned street layouts and water systems. Scholars of Mesopotamian history quickly recognized that numerous seals found at Mesopotamian cities such as Ur matched designs being discovered in the Indus Valley, attesting to long-distance contacts between the two empires.

But the Indus Valley civilization began neither in Mohenjo-Daro nor Harappa. Because it was first thought to have diffused from civilizations to the west, archeologists in the 1960's sought clues to the Harappan genesis at Mehrgarh, a site at the foot of the Bolan Pass, east of the mountain city of Quetta. They found early indications of Harappan styles, such as pottery designs, but no discernable signs of outside influence: The Harappans, it appeared, were truly an indigenous civilization.

"Discoveries at Mehrgarh changed the entire concept of the Indus civilization," says Ahmad Hasan Dani, professor emeritus of Islamabad's Quaid-e-Azam University and author of several books on South Asian civilizations. "There we have the whole sequence, right from the beginning of settled village life."

The excavations of Mehrgarh revealed that, as early as 7000 BC, its inhabitants were herding sheep, goats and zebus and planting fields of wheat and barley in small farming communities that they inhabited year-round. "They subsisted on a combination of domesticated and wild resources," says Richard Meadow, Harvard archeo-botanist and director of the Harappa Archeological Research Project, based in the modern village of Harappa. "They first depended more on wild game such as rhinoceros, elephant and wild buffalo. That gradually gave way to raising their own animals and crops." The Harappans have even been credited with the earliest known domestication of the jungle fowl that is the ancestor of today's chickens.

By about 5500 BC, Mehrgarh's citizens started to make and use pottery and ceramic figurines, and with these began an increasingly sophisticated craft industry. Manufacture of decorated ceramics and jewelry blossomed, and by 3500 BC Mehrgarh had grown into an important regional craft center, and settlements in other parts of the Indus Valley had developed parallel industries of their own. A few hundred years later, these villages and regions were trading technological innovations and products. The resulting social intercourse had a unifying tendency throughout the Indus Valley. Together with these industrial arts, the Harappans' social hierarchies, their writing system, their large planned cities and their long-distance trade mark them to archeologists as a full-fledged "civilization."

Indeed, commerce and trade appear to be the foundation on which the Harappans built far-reaching influence. Traders from the highlands of Baluchistan and northern Afghanistan brought in copper, tin and lapis lazuli. The Makran and southern coasts of today's Pakistan provided decorative shells. Timber was floated down the rivers from the Himalayas. Carnelian and agate came from Gujarat, and gold from southern Central Asia. Skilled Harappan artisans and specialized craftsmen turned such raw materials into useful and beautiful products for regional distribution and—as finds elsewhere have shown—for export by land and sea to Mesopotamia, Persia and Central Asia.

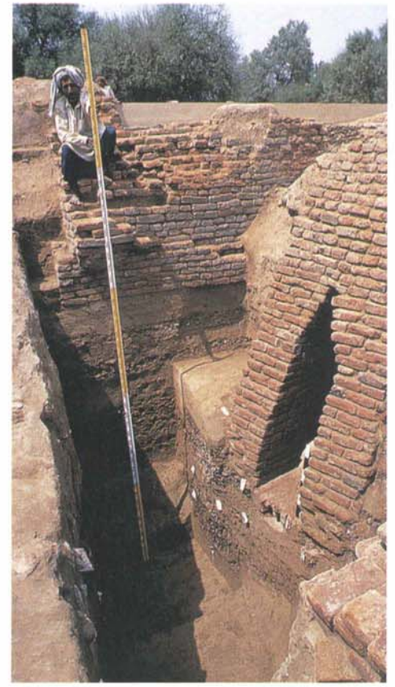
"It was an environment of economic symbiosis," says Farzand Ali Durrani, a Pathan archeologist and past vice-chancellor of the University of Peshawar, speaking over chapli kebabs at a Pashtun restaurant in Peshawar. "The southern states controlled the sea trade, just as Karachi does today. Ships from Meluhha [the Mesopotamian name for the Harappan nation] regularly sailed from Lothal, 400 kilometers [250 mi] up the coast from present-day Bombay, for the ports of Babylon." And they evidently made stops all along the way: Indus seals have been found in Oman, Abu Dhabi and Bahrain.

The modern city of Peshawar lies on what is thought to have been one of the Harappans' main overland trade routes. That route is now a major highway that constitutes the eastern approach to the fabled Khyber Pass and links the northwestern Indus Plain to the highlands of Afghanistan and Central Asia. An old branch of the route runs from Peshawar south into rugged tribal territory, through the modern towns of Kohat and Bannu and the foothills of the Sulaiman Mountains, and on down across the Gomal Plain to the early Harappan site of Rehman Dheri, where Durrani conducted an important excavation from 1976 to 1980.

"Our discoveries there clearly showed that the Harappans meticulously designed and laid out streets prior to 2800 BC," he says. "They outclassed the Egyptians and Mesopotamians in terms of planned cities."

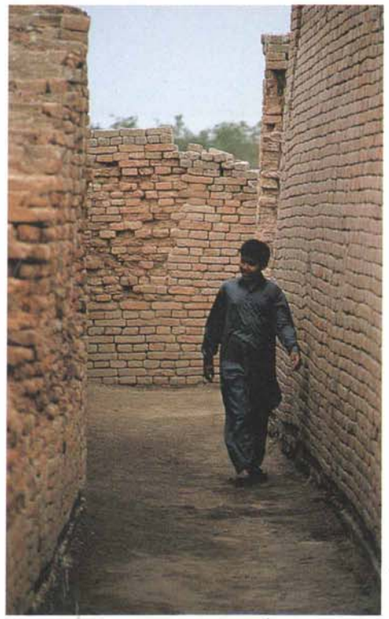
Harappan city planners were indeed far ahead of their time. Unlike most settlements of the ancient world, whose winding streets and randomly placed buildings suggest haphazard growth, all Harappan municipalities expanded by design—indeed, by the same design: A west-facing citadel in the city center, and a north-south and east-west grid of streets. Municipal drainage systems included covered "manholes" for clearing out debris, and all construction used standard-sized fired or mud bricks, depending on the structure. Neighborhoods were individually zoned for residences, shops, markets and manufacturing activities.

Mohenjo-Daro, the largest of the ancient Indus Valley cities, lies 575 kilometers (350



A large corbeled drain at Harappa carried off rainwater and sewage, drawing from drains in individual houses that comprise the first indoor plumbing system. ***Opposite:*** *The "Great Bath" at Mohenjo-Daro was plastered with gypsum, lined with bitumen, and colonnaded on three sides. It was a centerpiece of a city that may have had some 50,000 inhabitants.*

From left: *A miniature terracotta mask from Mohenjo-Daro depicts a horned deity. The beads in this pot date from 1700 BC and are made of imported jade, lapis lazuli, turquoise, amethyst, bloodstone and jasper as well as local steatite. An incomplete necklace from Mohenjo-Daro is made of gold, agate, jasper, steatite and greenstone. A terracotta ram figurine from Harappa may represent a sacrificial animal. This sandstone male head is probably a fragment of a seated sculpture.*



In 1986, the Pakistani–US Harappa Archaeological Research Project began the first major digs carried out in the Indus Valley in three decades. This site was excavated during 1998, uncovering a brick wall (center right), part of a building constructed with wooden beams and columns. ***Left:*** *At Mohenjo-Daro, narrow streets and alleyways branch off the main thoroughfares and lead into more private neighborhoods. Many of the brick houses were two stories high, with thick walls and high ceilings that kept the rooms cool.*

mi) south of Rehman Dheri on an old course of the Indus River. Where its citadel once stood, there is now a Buddhist stupa, but the old city plan is clear. "It is evident that Harappan cities like Mohenjo-Daro were largely governed by strong civic discipline," says Durrani. "And the streets and houses were purposely arranged to let the prevailing winds keep them clear and ventilated. It's the earliest example of civic environmental planning."

That planning included management of water and waste. Researchers have found that nearly every Harappan home had a bathing platform, with a brick drain and a sloping floor made of fired bricks and waterproofed with gypsum plaster. At Mohenjo-Daro there was at least one well supplying water to each housing block, and many houses had their own wells. Many also had private latrines, with individual drains that connected to covered or underground conduits that carried waste water, as well as excess rain from the streets, down to the river. And there is even a water-related structure archeologists have dubbed the Great Bath. Steps lead down into the swimming pool-sized complex lined with tightly fitted brick, sealed with a bitumen underlayer, and served by a massive drain with a corbeled vaulted ceiling, big enough to walk through. It has been interpreted as a public bath or ritual bathing area.

Whether in the workshops that were part of some houses in Mohenjo-Daro, in separate shops or in the fields, the Harappans' working lives and their commerce were regulated by well-established standards: Archeologists have found standardized cubical stone weights, for example, in ratios of one, two, four, eight and 16 units. Accounting may have been done using a complex and still-undeciphered script. (See sidebar, page 40.) The Harappans also left behind tiny seals, up to two or three centimeters (1") square, elaborately carved in soft stone such as steatite and used to make impressions in wet clay, probably to signify ownership of goods or shipments. Depicted in detail on these miniature works of art are animals such as "unicorns," humpshouldered zebu bulls, elephants, hairy-eared rhinoceroses and crocodiles, as well as symbols in the puzzling Harappan script. Archeologists surmise the motifs may have served to identify individuals or clans of merchants, or organizations holding interests in commercial activities.

Excavated skeletons show evidence of industrious work and healthy diets that led to soundness of body. Apart from some evidence of trauma to Harappan women's spines, caused by carrying heavy loads on the head, there are few signs of disease or malnourishment. The high-carbohydrate diet typical of early sedentary societies contributed to some tooth decay, but most Harappans whose graves have been excavated apparently died of natural causes.

A two-hour bus ride down another ancient trade route, now part of the Grand Trunk Road, leads from the acrid blue cacophony of downtown Lahore to a pit where archeologist Jonathan Mark Kenoyer is sweating over a large clipboard, shaded from the burning sun by a woven mat. He's drawing a stratigraphic cross-section of an excavation here at the site of ancient Harappa. A helper periodically sprays water on the sides of the pit to highlight its features. "There's only about a two-hour period each morning when we can work, while the light is just right and before it gets unbearable down there," says Kenoyer.

A professor of archeology at the University of Wisconsin, Kenoyer is field director of the Harappa Archeological Research Project. It's early May and already getting much too hot for fieldwork. But Kenoyer has stayed longer than the rest of his crew this year because he's pretty excited about this excavation in the so-called Great Granary. In 1924, the area was of special interest to John Marshall, director-general of the Archaeological Survey of India, who called the puzzling structure a granary because of its similarity to Mesopotamian finds. But Kenoyer thinks the "granary" has nothing to do with agriculture—it has no parallels to other structures in the South Asian grain-storage tradition, he points out.

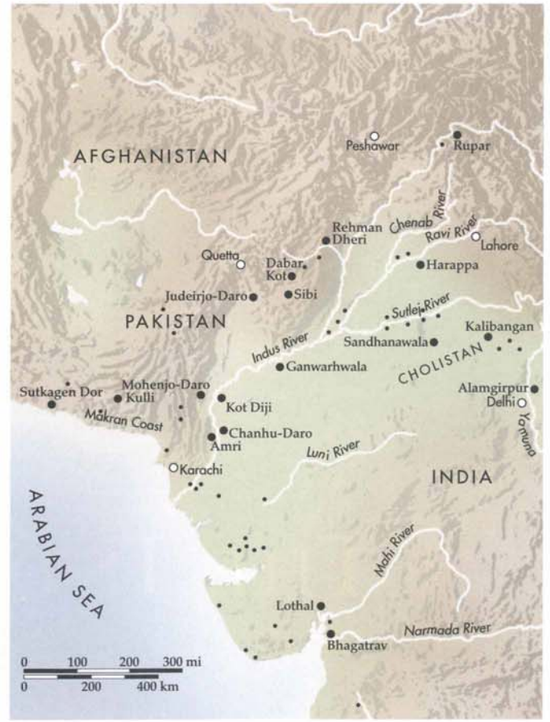
Kenoyer and other scholars hypothesize that it may have been a public building used as a gathering place for government officials. In such an organized culture, there must have been public officials, the argument goes, and they must have met somewhere, at intervals, to coordinate the many aspects of Harappan culture that have been found to be similar or identical in widely separated sites. Among the handful of digs active in the Indus Valley, these "granaries" have been found only at Harappa and Mohenjo-Daro, and Kenoyer hopes that his investigations and those of others will lead to understanding of Harappan political systems.

Kenoyer takes a break and we sit under the shade of a spreading pipal tree, often depicted on Harappan pottery. We're overlooking the granary excavation. Colorful kingfishers sing overhead and a light breeze from the wheat fields freshens the spot—probably one where Harappans also sat, discussing their day's work just this way, more than 4000 years before. "We're finding a lot of continuity in the archeological record here," says Kenoyer, author of the recent book *Ancient Cities of the Indus Valley Civilization* (Karachi, Oxford, ISBN 0-19-577940-1). "It's what Mughal theorized in his thesis back in 1971: Elements of this culture—writing, cubical weights—were around much earlier than we had first figured."

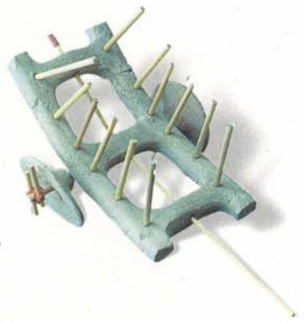
I ask him about the Harappans' demise. "It never happened," he responds. "The cities shrank in the second millennium BC, yes, but people still lived in places like Harappa long after that. The continuing prosperity of the bigger cities, like Harappa and Mohenjo-Daro, may have made them grow too large and unwieldy to administer, and so groups may have split off into smaller settlements. But those settlements were held together by their common culture," he says. Perhaps the dispersal was a way of providing flexibility to deal with the oft-changing and unpredictable rivers, he adds.

There is, in fact, overwhelming evidence that the Indus Valley civilization underwent a large-scale transformation early in the second millennium, when it ceased its commercial activities and long-distance trading. After 1900 BC there are no longer references to Meluhha in Mesopotamian writings, and no Indus seals are found in Mesopotamia after that date. All other remnants of the great Harappan commercial enterprises, including the factors-of-16 weights and use of the script, simply vanish from the record.

Sir Mortimer Wheeler, the British archeologist of military background who first dated the Indus Valley civilization, also proposed the first popular hypothesis to explain its demise: an invasion by Aryan armies from southern Central Asia. But no



A terracotta figurine of a bull without a hump, found at Harappa, implies there may have been different species of cattle in different parts of the Indus Valley. A toy cart from the Harappan site Nausharo, 4200 to 4300 years old, is nearly identical to carts still used in rural areas of Pakistan and India. Cubical weights in graduated sizes, the largest 16 times the weight of the smallest, conform to the system used throughout the Indus Valley.



THE INDUS ENIGMA

It's the greatest single mystery of the Indus Valley civilization," says Jonathan Mark Kenoyer, field director of the Harappa Archeological Research Project. He's talking about the Harappans' still-undeciphered script, an example of which may be what's inscribed on two pottery shards found at Kenoyer's dig, at a level that dates to 3200 BC. The three groups of symbols on the shards look like matchsticks and tiny forks attached at the handles.

The marks may simply have indicated ownership, and perhaps had no meaning in themselves, but they bear a close resemblance to, and may be precursors of, elements of the writing system that came into regular use in the Indus Valley around 2700 BC, and disappeared completely, along with the rest of Harappan civilization, between 1900 and 1700 BC.

Depending on whether one interprets similar-looking signs as variants or separate symbols, the Indus Valley script apparently consisted of about 400 characters that depict human and animal figures, and additional geometric shapes and symbols. By analyzing overlapping strokes and observing crowding toward the left ends of lines, archeologists have gathered that the symbols were almost always written from right to left.

More than 4200 objects bearing the script have been found, including seals, bangles, pottery, tools, utensils and small tablets of copper, steatite or clay—but these are only objects that have survived the millennia: The Harappans may have written prolifically on less durable materials like papyrus or cloth that are unlikely to be excavated. About 80 percent of the inscriptions are on seals or seal impressions, suggesting that the symbols may have been used primarily for commercial purposes, such as stamping bales of goods with an identifying mark.

Despite nearly 50 independent attempts to decipher the Harappan script in the past 80 years, including some recent ones using computers, it remains stubbornly enigmatic. It is distinctively different from the scripts of Mesopotamia or Egypt, and it bears no resemblance to writing systems, such as those used in Sanskrit or other Indo-Aryan languages, that later appeared in the region. Some scholars believe that the script's closest link is with writing of the Dravidian languages of southern India, such as Tamil and Malayalam, but there are no traces of other aspects of the Indus Valley civilization in that part of the subcontinent, and it seems unlikely that, if the Harappan script migrated there, no other aspect of the culture should have accompanied it.

Part of the decoding problem is that no bi- or multilingual inscription, like the famous Rosetta Stone, has ever been found. And the Harappan texts are short: None is longer than 26 signs, and the average length is only five, which does not give much opportunity for the development of recurring patterns of signs that might be discerned. Furthermore, the script may have served to express more than one language, as Roman, Arabic and many other forms of writing still do.

The undecoded script continues to lock up most of the secrets of the Indus civilization and of the Harappans' social and religious lives—the second great mystery, says Kenoyer. If the inscriptions could be read, scholars surmise, we'd be much closer to knowing how and what the Harappans worshiped, who their leaders were, what role religion played in their lives, and what the source was of their far-reaching organization and cultural uniformity.

evidence of warfare or violent attacks has ever been uncovered at any Indus site. Another theory was that the Harappans succumbed to disease—but their skeletons show no indications of that.

The general consensus among scholars is now that the decline was gradual, the result of a combination of factors in which both incoming Aryans and changes in river courses played a leading part. "The Aryans were a rural, nomadic tribal people with no written language, unlike the Harappans," explains Dani. The social and commercial upheaval caused by their migration into the subcontinent, he suggests, "may have choked off much of the supply of raw materials from south Central Asia around 2000 BC."

Upheaval of a different kind may have been another factor. The Indus Valley is a seismically active zone, and even minor changes in land levels can cause large shifts in river courses, especially on a broad, flat alluvial plain. Mughal's evidence, supported by more recent Landsat imagery, has shown there were in fact major shifts in the courses of the Indus and some of its tributaries, such as the Hakra and the Ghaggar, around this time. The Cholistan region surveyed by Mughal, in particular, had been an important breadbasket for the larger Harappan cities, supplying wheat and other grain. When the flow or the course of the Hakra River changed, Cholistan might no longer have been able to meet that demand, and traditional riverine trade routes would have been severely disrupted as well.

The *Rig Veda*, an account of the earliest Aryan oral traditions written between 1500 and 1000 BC, states that the Aryans first entered the Harappans' territory about 1800 BC, which is about the same time that the Harappans were trying to cope with the impact of the river shifts. Thus both their industry and their food supplies had become uncertain.

Under these circumstances, the Harappans would have found it difficult to maintain civic order, for, to the bafflement of scholars, they appear never to have developed any sort of standing army; neither has any evidence been found of militarism, battle damage, or even defensive fortifications in the Harappan domains. Instead, Kenoyer and others believe, the elite seems to have kept order by controlling and promoting trade, commerce and religion. Once the civilization had begun to break down, maintenance of civil order by military coercion would have been an unavailable option; many Harappans began to abandon their large cities.

Harappa's "granary" was named by archeologists eager to project a plausible function onto a puzzling brick structure: two rows of six rooms, apparently with ventilated floors, arranged along a central, paved passageway. But evidence of grain storage was never found, and the building is now believed to have had political or religious functions.

Kenoyer has made an observation that, with further study, may prove to be a key element in tracking the course of the Harappans after the collapse: the "unicorn" motif on the seals. He says that 64 percent of seals found carry this creature—probably an ox depicted in profile, thus appearing to have a single horn—and were probably used by the most affluent of the trading merchants. But what's intriguing, he notes, is that the "unicorn" motif first appears in Harappan sites around 2600 BC, when the civilization had reached its apogee, and disappears about 1900 BC, just when it starts a rapid decline. "Other motifs continue, but the 'unicorn' is expunged completely from all South Asian iconography after that: It seems to lose its value," he says.

Yet the "unicorn" motif continued to be used in Mesopotamia well after the Harappan collapse. This raises the possibility that the richer and more powerful Harappan merchants and traders, familiar with Mesopotamia, moved there when the basis of their economic power and influence began to fade. "We have modern analogies right next door," says Farzand Ali Durrani. "When Afghanistan was invaded in 1979, families with means had no problem leaving and finding a new country in which to live."

This polychrome pot dates from Harappa's Ravi Phase, between 3300 and 2800 BC. A leopard face with appliqué eyes probably depicts one of the predators that competed with humans for game.
***Opposite:** Five seals and a seal impression bear characters of the enigmatic Indus Valley script. Although the Harappans may also have written on impermanent materials, the inscriptions on stone and terracotta are very brief, greatly increasing the difficulty of deciphering them.*

FAR FROM HAVING DIED OUT, ANCIENT HARAPPAN CULTURE MAY UNDERGIRD THAT OF THE MODERN SUBCONTINENT, WHERE PUNJABI CRAFTSMEN SHAPE AND DRILL LONG BEADS WITH DRILLS VERY LIKE THOSE USED BY THE HARAPPANS OF 4000 YEARS AGO, AND BENGALI ARTISANS MAKE CONCH-SHELL BRACELETS ALMOST IDENTICAL TO THOSE EXCAVATED AT HARAPPA.

Well-off residents of Hong Kong also flooded into Canada, Britain and the United States in the last years before that territory reverted to Chinese control.

Without the urban elite, who held the reins of the civilization's mercantile system, Harappan craftspeople and workers may have had little option but to embrace the simpler Aryan way of life and the Aryan religion. There was no longer a need for commercial support systems like accurate weights and financial accounting records. And, as the Aryan's Vedic language was strictly oral at the time, Harappan writing might have been forgotten within a few generations. Says Dani, "Once you destroy the basis of industrialization, you destroy a civilization."

Thus the Harappans' model urban society ultimately broke down. But their legacy endures. Dani holds that the Harappan commoners, in their integration with the Aryans, may well have become that culture's lower caste, and still later the modern-day Untouchables or Shudras of the Hindu religion. "India is the only Aryan culture with a strict caste system," he points out. And the sanctity of water and rivers to today's Hindus might even be a cultural leftover of the importance that the baths of Harappa and Mohenjo-Daro appear to have had.

Indeed, the British historian V. Gordon Childe stated flatly that the Indus civilization "has endured; it is already specifically Indian and forms the basis of modern [subcontinental] culture." Today, in the bustling markets of Lahore, Punjabi craftsmen shape and drill long beads with drills very like those used by the Harappans of 4000 years ago, and make pottery using similar kick-wheels. Artisans in Bengal make conch-shell bracelets almost identical to those excavated at Harappa. Plow designs, bullock carts, fishing techniques and boats have all continued unchanged from those depicted in Harappan art. And, although the unicorn's origins as a symbol are still obscure, one of the earliest known words for the creature, in Hebrew, refers to it as a "wild ox"—not a horse—which may point to its first appearance in the Indus Valley in bovine form.

What does study of the Harappans mean for the larger understanding of human civilization? For an answer to that question, I turned again to Mohammad Mughal. "For over a century," he replied, "it was thought that civilization began in Western Asia, in Mesopotamia and Egypt. I would say that the most important contribution of Harappan study is that it shows conclusively, for the first time, that this just wasn't so. We have proof right here."

Dr. Graham Chandler is an archeologist and free-lance writer based in Calgary, Alberta. He specialized in early Harappan ceramics in his studies at the University of London.

The Harappa Archeological Research Project's website is at www.harappa.com

A hand-built bowl on a flaring pedestal, from the Ravi Phase, may be the predecessor of more common later pedestaled vessels. A wavy-horned blackbuck decorates a dish perforated for hanging —or a lid perforated for attaching to a jar— made after 1900 BC, in the Late Harappan Period. The trefoils may represent stars. ***Above:*** *Ravi-style pottery has been recreated by modern Harappan craftsmen. The man at left holds the original artifact; the potter in the center its replica.*

R. DAJANI / ARAB IMAGE FOUNDATION

Events & Exhibitions

Popular photography came to the cities of the Arab world in the early years of this century. In making photographs for friends and family, it became common to use vehicles—cars, motorcycles, trains, buses and aircraft—as props in both studio and location photography. In the Arab world as elsewhere, these vehicles had quickly come to represent independence and social and economic opportunity. Studio photographs often depicted people posed with backdrops or foregrounds showing trains, planes, automobiles and ships; personal photographs often included the vehicles that made certain activities possible or that, in some cases, provided the raison d'etre *of the photograph itself.* ***The Vehicle****, curated by the Arab Image Foundation of Beirut, exhibits photographs dating from the late 19th century until the 1960's. Darat al-Funun,* ***Amman****, through November 5; Townhouse Gallery,* ***Cairo****, January; French Cultural Center,* ***Damascus****, February. Information: +961 (1) 336-820 or info@fai.org.lb.*

Indian Paintings from the Marshall Collection emphasizes Mughal miniatures but also includes examples of all the painting styles of the small Rajput kingdoms. Mughal ateliers drew inventively on Persian, earlier Indian and European traditions, and later artists combined Mughal styles with the flat, intensely colored shapes of Indian folk painting. UC/Berkeley Art Museum, **Berkeley, California**, September 15 through November 28.

The Nature of Islamic Ornament, Part IV: *Figural Representation* examines the incorrect perception that figural representation was never permitted to appear in Islamic art. Metropolitan Museum of Art, **New York**, September 16 through January 2.

Egyptian Art in the Age of the Pyramids. This large exhibition spans the third through the sixth dynasties, and is the first to focus on the art of the Old Kingdom (2650–2150 BC), the first truly great era of Egyptian art. More than 250 works, ranging from portraits, luxury vessels, reliefs and unpainted limestone heads to furniture, monumental sculpture and tools, have been assembled from more than 30 museums. Catalogue. Metropolitan Museum of Art, **New York**, September 16 through January 9; Royal Ontario Museum, **Toronto**, opens February 12.

The Phoenecians in Sardinia presents results of recent archeological research on the Phoenecians' presence on the island between the ninth and the second century BC. Civico Museo Archeologico, **Milan**, through September 19.

The Golden Age of Chinese Archaeology: *Celebrated Discoveries from The People's Republic of China* focuses on discoveries made over the last 20 years, and includes some 200 objects in widely diverse media. National Gallery of Art, **Washington, D.C.**, September 19 through January 2; Museum of Fine Arts, **Houston**, opens February 13.

Clay Seals and Papyri is a special exhibition of seal impressions on papyrus documents, revealed as tiny works of art. Catalogue. Another exhibition, **Christian Papyri**, includes parchment and papyrus manuscripts from Egypt of the third to 10th century, including legal and liturgical documents, amulets and religious texts. Catalogue. Both at the Austrian National Library Papyrus Museum, **Vienna**, September 21 through December 31.

The Oriental Carpet is a rare display of a dozen fine pieces from the museum's collection of mostly 16th-century textiles. Museo Poldi Pezzoli, **Milan**, September 24 through October 10.

Film Focus/Egypt presents nine feature films set in or focusing on Egypt, ranging from *The Mummy* (1932) to *The English Patient* (1996), in celebration of the exhibition "Egyptian Art in the Age of the Pyramids." Information: 212-570-3949. Metropolitan Museum of Art, **New York**, September 25 through October 1.

Tulip, Rose and Parrot: *Fauna and Flora in Islamic Art* is a 2½-hour workshop which explores the different types of decoration used by the Ottoman, Mughal and Safavid Empires. Musée du Louvre, **Paris**, September 25, October 11, November 10 and December 1.

Temple: *Black-and-White Reflections From Turkey* shows contemporary Turkey's layers of civilization, using infrared photographic images by Ankara-born Reha Akcakaya. Information: 312-733-2787 or www.akcakaya.com. ARC Gallery, **Chicago**, September 28 through October 30.

The Mosque: *A Workshop* uses a model, slides and a tour of the Islamic collection to teach about Islamic architecture. Musée du Louvre, **Paris**, September 29, October 2, November 20 and December 15.

Islamic Portugal: *The Last Signs of the Mediterranean* covers the nearly eight centuries of Islamic culture in what is now Portugal. Museu Nacional de Arquelogia do Dr. Leite de Vasconcelos, **Belém, Lisbon**, through September 30.

Ikat: *Splendid Silks From Central Asia* features decorative hangings and articles of clothing produced by an intricate process of repeatedly binding and dying weft threads before they are stretched on the loom. Lustrous ikat fabrics were traded throughout Asia in the 19th century; 30 to 40 examples from the Goldman Collection are on display. Award-winning catalogue. Art Institute of **Chicago**, September 30 through January 9.

Royal Persian Paintings: *The Qajar Epoch, 1785-1925* shows more than 100 works, from miniature manuscript illuminations to life-size figural paintings. Information: +44-171-323-6230. Brunei Gallery, **London**, through September 30.

Teaching About the Arab World and Islam is the theme of teacher workshops co-sponsored by the Middle East Policy Council in Washington, D.C., and conducted by Arab World and Islamic Resources and School Services (AWAIR) of Berkeley, California. Sites and dates include **Arlington, Texas**, October 1; **Kansas City, Missouri**, October 8; **Lawrence, Kansas**, October 11; **Oklahoma City**, October 30; **Minneapolis, Minnesota**, October 21; **Mankato [Minnesota]** State University, November 12; **Sandy, Utah**, November 13. Information: 202-296-6767 or 510-704-0517, or awair@igc.apc.org.

Enter the Kingdom of Saudi Arabia: *Enter Al Baha* displays drawings, notes and watercolors by artist Carol Koutnik made during a sojourn in the Sarawat mountains in the southwest of the country. **Rockport [Texas]** Center for the Arts, October 2 through November 13.

Professor Glob and the Garden of Paradise surveys ground-breaking Danish archeological and ethnographical investigations of the 1950's and 1960's in Bahrain and presents 4500 years of the varied history of this past and present center of international trade in the Arabian Gulf. As the bronze-age commercial link among the civilizations of the Indus, Oman and Mesopotamia, Bahrain was the home of the rich and sophisticated Dilmun civilization (2500–1800 BC) and enjoyed another, less well-known florescence at the intersection of Hellenic and Parthian culture (300 BC–600) as Tylos. Sites from that period have yielded carved stelai, glass from as far away as Egypt, and jewelry of gold, precious stones and the famous Gulf pearls. Danish scholars made important contributions to present-day knowledge of Gulf civilizations. Moesgård Museum, **Århus, Denmark**, opens October 2.

Searching for Ancient Egypt: *Art, Architecture and Artifacts From the University of Pennsylvania Museum* displays 130 highlights of a century-old archeology program. They date from 5000 BC to AD 500, and trace the cultural development of the Nile Valley. **Birmingham [Alabama]** Museum of Art, October 3 through January 16.

The Tiger and the Thistle: *Tipu Sultan and the Scots in India, 1760–1800* marks the 200th anniversary of the death of Tipu Sultan, "the Tiger of Mysore" in southern India. Tiger motifs and tiger stripes decorated Tipu's personal possessions, including the jewelry, weapons and textiles in the exhibition. Paintings, engravings, books and manuscripts—some from the Sultan's library—recall the British colonial expansion and the prominent role of Scots in it. Catalogue £13. National Gallery of Scotland, **Edinburgh**, through October 3.

Mehr and Sher Ali perform the *qawwali* music of Pakistan on the steps of the Freer Museum, **Washington, D.C.**, October 8, 7:30 pm.

Letters in Gold: *Ottoman Calligraphy from the Sakıp Sabancı Museum, Istanbul* draws upon one of Turkey's leading private collections to display 70 exceptional examples of Ottoman-era calligraphy from the pens of such masters as Şeyh Hamdullah, Ahmed Karahısarı, Hafiz Osman and Sami Efendi. Catalogue. **A Grand Legacy:** *Arts of the Ottoman Empire* complements the "Letters in Gold" exhibition with Ottoman paintings, ceramics, textiles and metalwork that express the ambition, grandeur and complexity of the empire. Both at the Sackler Museum, **Cambridge, Massachusetts**, October 9 through January 2.

(continued from previous page)

Médinas, an exhibition of photographs of contemporary Morocco by Jean Marc Tingaud, is on display at the Institut du Monde Arabe, **Paris**, through October 10.

The Library of Robert Michael Burrell, bibliophile and respected British expert in Middle Eastern affairs, comprises some 10,000 volumes—many rare—collected over 40 years, including a printed first Latin edition of the Qur'an with a preface by Martin Luther. The collection will be sold at auction at Sotheby's, **London**, October 14.

The Egyptian Temple: *Rites and Architecture.* This 2½-hour workshop focuses on Madinat Habu to explore how ancient architects solved construction problems. Musée du Louvre, **Paris**, October 16, November 15 and December 15.

Treasures from the Royal Tombs of Ur presents 150 extraordinary objects revealing traditions of royal life and death, excavated in the 1920's by Sir Leonard Woolley. They include the famous "Ram in the Thicket"—a statuette of a goat nibbling the leaves of a tree—jewelry, a comb, a wooden lyre decorated with a gold-and-lapis bull's head, games, furniture, seals and vessels, many found in the intact tomb of a woman—a queen or high priestess—named Puabi. Catalogue $50/$35. Lecture: "Women of Ur" October 21, 7:00 pm. Sackler Gallery, **Washington, D.C.**, October 17 through January 17.

Facing West: *Jews of Central Asia and the Caucasus* explores the little-known world of the Jewish communities of the Caucasus and largely Muslim Central Asia, displaying costumes, jewelry and photographs. Jewish Museum, **New York**, through October 17.

Ancient Near Eastern Art: *The New Galleries* have been renovated and reinstalled, with natural light now illuminating the Assyrian reliefs. They display sculpture, metalwork, seals and other objects dating from 8000 BC through the sixth century of this era, from Mesopotamia, Iran and neighboring areas, ranging from Anatolia and Arabia to the Indus Valley, from Central Asia to the Mediterranean. Metropolitan Museum of Art, **New York**. Opens October 19.

Secret Pleasures: *Treasures From the Textile Museum and Private Collections* is the museum's 22nd annual rug convention, featuring thematic presentations by scholars and collectors, illustrated by the textiles themselves rather than by slides. Cost: $285. Information: 202-667-0441 ext. 35. Textile Museum, **Washington, D.C.**, October 22–24.

Egypt: Between the Sun and the Crescent Moon presents 78 textile pieces—most never before exhibited—whose threads tie us to pharaonic, Roman, Byzantine, Arab and Ottoman Egypt, worlds which have in many ways influenced ours. Whether locally manufactured or imported, these textiles shed light on humans' relations with their environment and on the cultures they created. Fundació Caixa de **Manresa (Barcelona), Spain**, through September 30.

Jerusalem displays artifacts and lithographs by David Roberts. Catalogue. Lesson plans (sixth grade) regarding Saudi Arabia also available. For information call 816-697-2526 or 817-346-1535. Nance Museum, **Lone Jack, Missouri**, through mid-November.

India: *A Celebration of Independence, 1947-1997* is a collection of 240 significant photographs that document India's independence through the eyes of leading Indian and Western photographers. **Chicago** Cultural Center, October 30 through December 30.

Treasures of Antiquity: *Masterpieces of the Miho Museum at Otsu* (near Kyoto) displays 60 objects from the Shumei Family Collection that represent the pinnacles of artistic achievement of the Egyptian, Bactrian and Achaemenian cultures: silver and wooden statues, gold and silver cups, silver-gilt rhyta, jewelry and other items. Catalogue. Information: fax +43-1-523-2770. Kunsthistorisches Museum, **Vienna**, through October 31.

The World of Islam presents some 100 photographs of the Islamic world from Morocco to China. Open-Air Bible Museum, **Nijmegen, Netherlands**, through October 31.

Scythian Gold From the Steppes of Ukraine presents 165 of the finest gold objects from Scythian graves and burial mounds, many in the "animal style" associated with the Central Asian steppes, and many excavated since 1975 and thus never exhibited in the United States. The Scythians, a nomadic people who originated in Central Asia in the early first millennium BC, flourished in what is now Ukraine from the fifth to the third century BC through trade with the Greek cities of the Black Sea coast. Arms, horse trappings and other artifacts show Near Eastern and Greek influence, and the recently excavated items are causing a reevaluation of the interrelationships among the Aegean world, the Near East, and Central Asia. **San Antonio [Texas] Museum of Art**, November 7 through January 30.

Henning Larsen: *The Architect's Studio.* One of the most important architects of his generation, Dane Henning Larsen's works include the Foreign Ministry building in Riyadh. The exhibition focuses on his formal concepts and his working processes. Louisiana Museum of Modern Art, **Humlebæk, Denmark**, November 12 through February 27.

Pharaohs of the Sun: *Akhenaten, Nefertiti, and Tutankhamen* focuses on the cultural flowering of the Amarna period—two decades in the mid-14th century BC—that centered on the revolutionary pharaoh Akhenaten, sometimes called the first monotheist. With his wife, Nefertiti, he engineered a wholesale reorganization of Egyptian religion, art and politics. The exhibition presents more than 300 objects from 37 lenders. Museum of Fine Arts, **Boston**, November 14 through February 6; **Los Angeles** County Museum of Art, March 19 through June 4.

From the Alhambra to the Taj Mahal: *Journeys With Open Eyes* displays some 80 paintings, drawings and prints that record the experiences of 19th-century Swedish travelers in the lands of Islam. Nationalmuseum, **Stockholm**, through November 14.

***Matisse in Morocco**, at the Institut du Monde Arabe, **Paris**, through January 30. The artist's two stays in Morocco in 1912 and 1913 strongly affected all his subsequent work.*

Oil Patch Dreams: *Images of the Petroleum Industry in American Art.* Sixty works by such notable artists as Norman Rockwell, Andy Warhol and Thomas Hart Benton capture the impact of oil on the 20th century. **Wichita Falls [Texas]** Museum and Art Center, through November 16.

"Only the Best": *Masterpieces of the Calouste Gulbenkian Museum, Lisbon* demonstrates the range and quality of the collection assembled by Istanbul-born oil magnate Gulbenkian, including Islamic ceramics and glass, Egyptian sculpture, Armenian illuminated manuscripts and Persian and Turkish textiles. Catalogue. Metropolitan Museum of Art, **New York**, November 16 through February 27.

Imaging the Word: *New Selections of Calligraphy From the Islamic World* includes works on paper that date from the ninth to the 20th century, shown with inscribed textiles, coins, architectural fragments and other objects to highlight the spiritual and esthetic dimension of the art of writing. Sackler Gallery, **Washington, D.C.**, November 17 through May 7.

Antoin Sevruguin and the Persian Image offers an important pictorial record of the social history of Iran, displaying 50 photographs grouped in themes: everyday life, ethnography, the court, antiquities, Western fantasy, architecture, and women. Sevruguin, one of the great 19th-century photographers and a visual interpreter between East and West, ran a successful commercial studio in Tehran from the late 1850's until 1934. Sackler Gallery, **Washington, D.C.**, November 21 through May 28.

Constructing Identities: *Recent Work by Jananne al-Ani* addresses the issue of Orientalism, in particular the representation of women. Sackler Gallery, **Washington, D.C.**, November 21 through February 28.

Splendors of Ancient Egypt: *Egyptian Art from the Collection of the Pelizaeus Museum* exhibits more than 200 pieces dating from the Old Kingdom to the seventh century AD, including mummy cases and a five-meter scroll containing texts from the Book of the Dead. Catalogue $15. **Virginia** Museum of Fine Arts, **Richmond**, through November 28.

Faces of Morocco is the result of Gérard Rondeau's assignment to photograph Moroccan writers, painters, historians, sculptors, musicians, architects, actors and filmmakers. Musée Eugène Delacroix, **Paris**, December through March 15.

Photographing History: *Fred J. Maroon and the Nixon Years, 1970–1974.* Arab-American photographer Maroon had extraordinary access to the White House during what became extremely interesting years. National Museum of American History, **Washington, D.C.**, through December 5.

The **Three Graces:** *Music, Painting and Poetry in the Art of India.* Paintings from various courts throughout India and dating from the 16th to the 19th century depict personifications of various ragas (musical modes and melodies), musical themes and social situations, and serve as an introduction to the music of South Asia. **Los Angeles** County Museum of Art, through December 6.

Live Like the Banyan Tree: *Images of the Indian American Experience* features still photography by David Wells as it explores the ways that coming to America has affected the lives and outlooks of Asian Indian immigrants of various religions. Balch Institute for Ethnic Studies, **Philadelphia**, through December 31.

A Dream of Eternity: *Egyptian Antiquities from the Gustave Schlumberger Collection* introduces the rites and beliefs of ancient Egypt through sculpture, amulets, *ushabtis*, jewelry, and vases, glasses and liturgical objects. Musée Archéologique, **Strasbourg**, through December 31.

Farouk Hosny/Adam Henein: *Contemporary Egyptian Artists and Heirs to an Ancient Tradition* features some 34 paintings and 50 sculptures by two of the most prominent artists who draw on Egypt's rich past and vibrant present. Metropolitan Museum of Art, **New York**, through January 23.

Cracking Codes: *The Rosetta Stone and Decipherment* marks the bicentenary of the discovery of the famous fragment of black basalt with an updated, multi-section exhibit covering the variety of the world's writing systems and accounts of other, more recent, decipherments, as well as the history of the stone itself and a guide to reading hieroglyphs. Information: www.british-museum.ac.uk. British Museum, **London**, through January 16.

Asia-Pacific Triennial of Contemporary Art: *Beyond the Future* exhibits work by 75 artists from 20 countries and regions in a wide range of media. Catalogue. Information: www.apt3.net. Queensland Art Gallery, **South Brisbane, Australia**, through January 26.

Matisse in Morocco substantiates the painter's statement that "revelation came to me in the East." During his two journeys to Morocco in 1912 and 1913, Matisse discovered the plasticity of Arab and Islamic architecture and acquired a new understanding of light and its intensity that informed all his subsequent work. Institut du Monde Arabe, **Paris**, through January 30.

World 2000: *Teaching World History and Geography* is a conference sponsored by six Texas universities, designed to offer strategies to help secondary-school and college teachers build more comprehensive curricula—while avoiding "factual overload"—through well-designed thematic and regional approaches. Information: www.dla.utexas.edu/world2000, 512-475-7202, fax 512-475-7222. Hyatt Regency on Town Lake, **Austin, Texas**, February 11–12.

The Enlightened Eye: *Gifts from John Goelet* includes Islamic artworks among the 40 years of donations to the Sackler Museum, **Cambridge, Massachusetts**. Opens February 12.

Ancient Faces: *Mummy Portraits from Roman Egypt.* During the first to third century in Egypt, painted panel portraits—"Fayum portraits"—were often placed on the heads of mummies. Their direct gaze and realism bring the inhabitants of Roman Egypt before us with compelling immediacy. Some 70 portraits, along with mummy coverings, masks, jewelry and funerary stelae are on display. Catalogue. Metropolitan Museum of Art, **New York**. Opens February 15.

The Topkapı Palace: *Jewels and Treasures of the Sultans* features more than 200 artifacts and works of art from Topkapı Palace in Istanbul, for 400 years not only the residence of the rulers of the Ottoman Empire but also the center of the empire's dynastic power, its military administration and its religious leadership. Corcoran Gallery of Art, **Washington, D.C.**, opens March 1.

Exotica 2000: *The Age of Portuguese Discoveries: Exotic Worlds and their Impact* brings the age of discovery to life, displaying 200 objects from Austrian, Portuguese and Spanish collections that once found their places in the "chambers of wonders" of European merchant houses and rulers. Ostrich eggs, *cocos-de-mer*, narwhale horns and similar oddities were collected along with exotica made of mother-of-pearl, ivory, and jade. Kunsthistorisches Museum, **Vienna**. Opens March 4.

The Dead Sea Scrolls will explore the historic context of the scrolls' discovery and their authorship. Parts of 15 of the parchment scrolls are on display, along with 80 artifacts—a storage jar, coins and leather sandals—from the area where they were discovered in 1947. Field Museum, **Chicago**, opens March 10.

Recent Acquisitions: *Asian* is one of a year-long, multi-gallery series of exhibitions showcasing recent acquisitions. Sackler Museum, **Cambridge, Massachusetts**. Opens March 11.

Nuzi and the Hurrians: *Fragments From a Forgotten Past* opens a window on the little-known world of the Hurrians, displaying objects excavated at Nuzi, now Yorghan Tepe, in northeastern Iraq. Nuzi yielded finds—including nearly 5000 cuneiform tablets—that illuminate everyday life in the 14th century BC. Very early glass, pottery and figurines, jewelry, tools and weapons are among the 150 objects on display. So are texts of depositions taken in a lurid case of official malfeasance. Harvard Semitic Museum, **Cambridge, Massachusetts**, through April 2001.

Mysteries of the Mummies: *Rotating Preview* will present at least one important exhibit—a coffin, a mummy, canopic jars, and so on—every six months as the museum cleans and conserves items in its recent acquisition of ancient Egyptian artifacts. Carlos Museum, **Atlanta**, through summer 2001.

The Saudi Aramco Exhibit, which relates the heritage of Arab-Islamic scientists and scholars of the past to the technology of today's petroleum exploration, production and transportation, has been extensively renovated and updated, and will be reopened in the fall. **Dhahran, Saudi Arabia.**

Information is correct at press time, but please reconfirm dates and times before traveling. Readers are welcome to submit information for possible inclusion in this listing.

HENRI MATISSE, *THE DOOR OF THE CASBAH*, 1912-1913, PUSHKIN MUSEUM / INSTITUT DU MONDE ARABE

"HASSAN FATHY BRIEF"
Listed here are several books by or about Hassan Fathy that readers of our "brief" on the Egyptian architect, in the July/August 1999 issue of *Aramco World*, may turn to for more information.

Hassan Fathy: ***Construire avec le peuple: Histoire d'un village d'Egypte, Gourna.*** Editeur Sinbad, Paris, 1977–1978, 2 vols. The first complete account, no longer in print.

Hassan Fathy: ***Architecture for the Poor: An Experiment in Rural Egypt.*** University of Chicago Press, 1976 pb edition, 0-226-23916-0. The seminal work in English. Illustrated; includes detailed appendices on costs, training, organization, brick-making and so on.

Hassan Fathy (Walter Shearer and Abd-el-rahman Ahmed Sultan, eds.): ***Natural Energy and Vernacular Architecture: Principles and Examples With Reference to Hot Arid Climates.*** University of Chicago Press, 1986 hb, 0-226-23917-9. The practical teaching document: concise on principles, fully detailed—with formulas, tables, drawings and photographs—on the scientific and engineering bases of building in accordance with those principles.

James Steele: ***Hassan Fathy.*** Academy Editions/St. Martin's Press, 1988 pb edition, 0-85670-918-2 (UK), 0-312-01140-7 (US). Introduction by Abdel Wahed El-Wakil. Heavily illustrated; includes abstracts in five languages, glossary, notes, list of buildings and projects, and bibliography.

James Steele: ***An Architecture for People: The Complete Works of Hassan Fathy.*** Thames & Hudson/Whitney Library of Design, 1997 pb edition, 0-8230-0226-8 (US). Heavily illustrated, more accessible than the book above. Includes chronology, notes, bibliography, glossary, index.

William Facey: ***Back to Earth: Adobe Building in Saudi Arabia.*** Al-Turath/London Centre of Arab Studies/St. Martin's Press, 1997, 1-900404-13-3. Introduction by Prince Sultan ibn Salman ibn 'Abd al-'Aziz Al Sa'ud. Heavily and beautifully illustrated; the story of the reconstruction of the farmhouse and the rehabilitation of the farm at al-'Udhaibat, but also ranges far more widely, both historically and geographically. Glossary, bibliography, index.

Jean-Louis Bourgeois: ***Spectacular Vernacular: The Adobe Tradition.*** Aperture, 1996, 0-89381-672-8. Description, analysis and passionate advocacy focusing on West Africa and Southwest Asia. Heavily illustrated.

Geoffrey King: ***The Traditional Architecture of Saudi Arabia.*** I. B. Tauris/St. Martins, 1998, 1-86064-339-6. Describes and illustrates features of vernacular architecture by towns and villages of each region of the kingdom.

"UNSUNG HEROES": The website of the United Nations High Commission for Refugees provides information, updated weekly, on the Kosovo situation at www.unhcr.ch/news/media/kosovo.htm.

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