After nearly a quarter-century of isolation, Iran is again admitting foreign archaeologists. Although politics could easily derail this exciting new development, Western and Japanese researchers are willing to take the risk in order to gain access to this data-rich land

# Iran Reopens **Its Past**

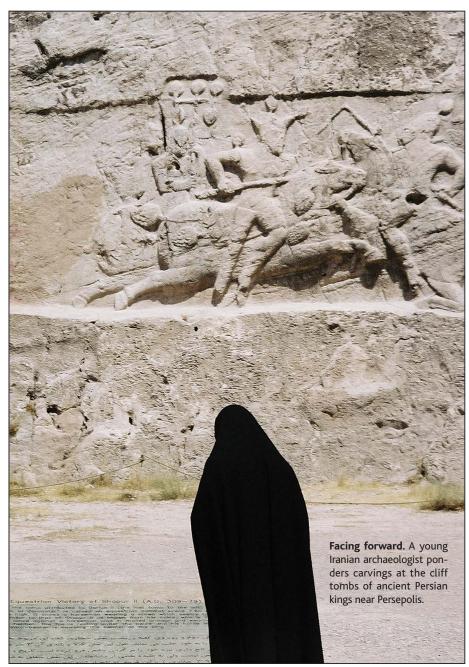
**Persepolis**—The ruins of this ancient Persian capital, burned by Alexander the Great in 330 B.C.E., were almost laid to waste a second time nearly 25 years ago. A mob led by a mullah set out from the southern Iranian city of Shiraz bent on destroying the storied site, a symbol to Islamic revolutionaries of both paganism and the shah's tyrannical rule. Cooler heads prevailed, however, and the provincial governor convinced the mob to disperse.

This summer, another eager group left Shiraz for Persepolis, this time by airconditioned bus after a lavish poolside banquet hosted by the governor's successor. This party of foreign archaeologists was here as part of an unprecedented attempt by Iran's leaders to entice researchers from abroad to return and start digging again. For more than 2 decades, the wealth of archaeological treasures in this country—a center of early agriculture, a crossroads between Europe and Asia, and a cradle of great empires and reli-



Regime change. Masoud Azarnoush welcomes foreign archaeologists, but as 50-50 partners.

gions—has been offlimits to outsiders. But in recent years, reformers gained prominent positions in government and the economy has boomed. Now Iran's tens of thousands of important archaeological sites are under threat from rampant development and looting, and its small, fragmented, and isolated community of archaeologists is struggling to protect them.



So the Iranian Cultural Heritage Organization (ICHO), part of the Ministry of Culture and Islamic Guidance, is ready to reopen the doors to foreigners. But unlike in earlier decades, they want visiting researchers to work in equal collaborations with Iranian archaeologists. Many foreign researchers have taken up the offer. Already, German, Australian, Japanese, and U.S.

teams have started work on joint projects with Iranian colleagues, and plans for a halfdozen more are being drawn up. The top three American universities in the field—the University of Chicago, the University of Pennsylvania (Penn) in Philadelphia, and Harvard University—are now negotiating long-term agreements with ICHO.

To make Iran more hospitable for re-

search, ICHO is constructing a new conservation laboratory, renovating the aging Iran Bastan Museum, and creating independent research institutes at important archaeological sites. The ministry also shelled out more than \$300,000 to host an international conference in Tehran in August on ancient cultural relations between Iran and the West. Forty foreign archaeologists, many of whom were returning to Iran for the first time since the 1979 revolution, were flown to Tehran, put up in one of the capital's most luxurious hotels, fêted at a banquet in the palace garden of the shah, and treated to a 3day excursion to important historical sites such as Persepolis. "I believe the people who organized and funded this are serious," says Gilbert Stein, director of the University of Chicago's Oriental Institute, who attended the meeting. "I'm optimistic this collaboration is going to happen."

Nevertheless, the door could easily be slammed shut again because of, among other obstacles, Western worries about Iran's nuclear program, internal power struggles between reformists and conservatives, or bureaucratic infighting among the fiefdoms of archaeology here.

# An "unavoidable land"

Iran's pull on archaeologists such as Stein is magnetic. Nearly three times the size of France, the country stretches from Turkey and Iraq in the west to Afghanistan and Pakistan in the east. Hunter-gatherers wandered on the central plateau 30,000 years ago. In

the jagged Zagros Mountains, humans first domesticated animals around 8000 B.C.E. A series of empires, starting with Elam and its capital of Susa in the 12th century B.C.E., rose and fell in the following millennia.

Traders, nomads, and generals used Iran, a land corridor sandwiched between the Caspian Sea in the north and the Persian Gulf in the south, to ferry semiprecious stones, flocks, armies, and silks from Central Asia, China, and India to the West. From the other direction came Sumerian seals, Greek artisans, Roman gold, and the Prophet Muhammad's faith. Critical questions about early agriculture, nomadism, state formation, international commerce, and religious movements in the region make this a crucial piece in the Asian puzzle. "Iran is an unavoidable land," says Masoud Azarnoush, director of ICHO's Archaeologi-

cal Research Center in Tehran, which employs some 30 archaeologists.

This wealth produced a golden era in the field. "Iran in the 1960s and '70s drew a major influx of younger scholars at the forefront of archaeology," says Harvard's Irene Winter. "It was at the cutting edge of recording and data processing—not just object hunting." Scholars began to conduct broad surveys to understand land-use patterns and urban development, and they introduced new technological advances, from x-ray diffraction for examining the source of materials to radiocarbon dating.

Much of that was brought to a halt by the forces unleashed by the fall of the shah.

1976 festival celebrating 2500 years of Persian history at Persepolis outraged conservative mullahs with its excess of food, wine, and elaborate decorations and helped spark the regime's downfall 3 years later—and inspired the Shiraz mob.

The revolution abruptly halted all foreign digs, closed universities, and prompted Iranian archaeologists to either flee the country or wait for an intellectual thaw. Foreign Asia specialists took their expertise and new techniques to Turkey, Israel, Syria, and then Central Asia when the Soviet Union collapsed a decade later. "An unforeseen conse-

quence of the Iranian revolution has been a far better understand-



Visas were hard to obtain, and dig permits were denied to foreigners. That attitude was due in part to a century of foreign excavations that operated under few constraints and tended to sideline Iranians. At Susa, for example, European visitors were treated to elegant dinners with fine wines; the gift of a recently excavated artifact was sometimes part of each guest's table setting. "There was the smell of neocolonialism back then," says Remy Boucharlat, who directs the French Institute of Archaeology in Tehran.

At the same time, the shah's regime increasingly used archaeology to suggest links to glorious ancient rulers such as Cyrus and Darius of the 6th and 5th century B.C.E. "We had the impression that archaeologists served to enhance certain ideological aspects of the regime before the revolution," says Azarnoush. The shah's extravagant

# IRAN'S RICH AND TURBULENT PAST

**8000 B.C.E.** First domestication of sheep and goats in Zagros Mountains

**7500 B.C.E.** First agricultural villages

**4200 B.C.E.** Susa founded on Mesopotamian plain

**2700–1500 B.C.E.** Elamite kingdom in southwestern Iran

**circa 2500 B.C.E.** Jiroft civilization flourishes in southern Iran

**1000 B.C.E.** Nebuchadnezzar I of Babylon destroys Susa

**550–330 B.C.E.** Achaemenid (Persian) Empire

500-425 B.C.E. Persepolis constructed

**331–247 B.C.E.** Alexander and successors control Iran

247 B.C.E.-224 C.E. Parthian Empire

224-651 Sassanian Empire

**634** Arab armies and Islam arrives

1200 Genghis Khan devastates Iran

**1380–1501** Timurid Empire

1501-1722 Safavid Empire

ing of its neighbors," Harvard archaeologist Karl Lamberg-Karlovsky told participants at the August conference in Tehran. Azarnoush—who himself emigrated for a time to the United States—says that Iranian digs never entirely ceased. But the revolution and subsequent Iran-Iraq war left little support or funding until the late 1990s.

#### **Opening windows**

In 2000, reformist President Mohammad Khatami, speaking at the United Nations, called for a "dialogue among civilizations." The same year, a joint Iranian-German team began excavating an ancient mining site near the village of Arisman on the edge of the central Iranian plateau in a bid to understand ore production and trade during the 3rd and 4th millennia B.C.E. Soon a team of Iranians and Australians started a survey of Elamite sites, and an Iranian-born researcher from Chicago won permission to work in the eastern province of Khuzistan.

The ministry leadership then decided in 2001 to make a dramatic appeal to foreigners by organizing a meeting to bring them to Iran, an idea proposed by Abdoul Majid Arfaee, an Elamite specialist who worked at Tehran's Bastan Museum. "When you are in a room which has been shut up for a long time, the air is stale," explains ministry adviser Keyvan Sepehr. "We are trying

to open a window and change the atmosphere a little." The effort to bring in foreigners has met with some resistance, he admits. "We have some conservative academics who disagree with this approach, but we can convince them we cannot close the door forever." When the meeting finally took place, in August this year, the ICHO chief was blunt in his welcoming address. "Isolation will result in backwardness," said Seyyed Mohammed Beheshti. "We have no other alternative but to cooperate."

Iranian officials are paying particular attention to relations with U.S. universities. They have asked Chicago, Penn, and Harvard first to each put together a more general framework outlining a long-term relationship—an unusual step. Holly Pittman, an art historian at Penn, says Iranian officials are keen to ink these deals before the upcoming Iranian presidential election. "They want to get these agreements in place so if there is a change in administrations, it would be harder for conservatives to turn things around."

#### Hold the sugar

Foreign archaeologists are arriving just in time. Innumerable ancient sites are disappearing under highways, plowed fields, and expanding cities as Iran's population and economy mushroom. "That exerts tremendous pressure on us," says Azarnoush. The only remnants of many sites are bags of shards collected long ago and stored in the Bastan Museum.

A couple of dozen kilometers south of Tehran, for example, one side of a pre-Bronze Age mound called Tepe

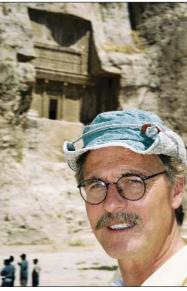
Chesme Ali is covered with houses, but the other half has been rescued by being turned into a park with grass and fountains. Other sites have not been so lucky. Tepe Pardis is a pre—Bronze Age mound nearly surrounded by vast brickyards feeding Tehran's endless appetite for building material; bulldozers have already taken a chunk off the northern edge. "We are turning our cultural heritage



**Quality control.** Isolation has taken a toll on Iranian archaeology, says Hassan Fazeli, director of the University of Tehran's Archaeological Institute.

into bricks; it's a great tragedy," says Rahman Abbasnexhad, an archaeology graduate student at the University of Tehran who wants to start excavating the site in 2006 but isn't sure what will be left.

Perhaps one of the greatest archaeological tragedies is unfolding in Khuzistan, the southwestern province that borders Iraq and was the center of the Elamite civilization in the 2nd millennium B.C., maintaining close contacts with nearby Mesopotamia. First the region bore the brunt of the brutal Iran-Iraq



**New face.** Western researchers such as Remy Boucharlat say they are happy to leave old colonial days behind.

war, and now it is being intensively planted with sugar cane. "Sugar cane is the most destructive crop for archaeological sites; they plane off the ground, and there is unremitting cultivation using heavy hydraulic machinery," says Nicholas Kouchoukos, a University of Chicago archaeologist who has recently worked in the province.

Sites such as Jundi-Shapur, an important city under the Sassanian empire that flourished during the time of Rome, boasted universities and palaces in the early centuries of the common era. Now Jundi-Shapur

has been turned over to farmers despite ICHO protests. "We are always trying to coordinate with development plans," says ICHO deputy of research Jalil Gholshan. "The problem is that Iran is full of archaeological sites." He says ICHO can only hope to limit the destruction: "We can't keep the entire country intact."

### **Tourist trade**

Influencing developers requires clout, and under Beheshti's leadership, ICHO—which receives about \$30 million annually—is starting to gain some political and financial muscle. The Bastan Museum, for example, plans a \$2.5 million renovation and expansion, and the basement storage areas have already been modernized with wellorganized storerooms, thick steel doors, and video cameras in freshly painted hallways. In addition, the museum is establishing research centers for specific periods.

After the revolution, Iranian authorities focused on building a modern facility for the Islamic collections next door to the Bastan. As a result, much of the pre-Islamic material was neglected. "There were many problems; nothing was organized," says Mohammad Reza Kargar, the Bastan director. A bevy of young researchers in the past 2 years has taken on the task of "re-excavating" the dusty storage rooms containing more than 300,000 artifacts as a precursor to the renovation. Shahrokh Razmjou, a Ph.D. student heading the Center for Achaemenid Studiesdevoted to the era of the first Persian empire—says he recently found dozens of boxes of artifacts, some wrapped in Parisian newspapers from the 1930s, that had not been opened since they were excavated.

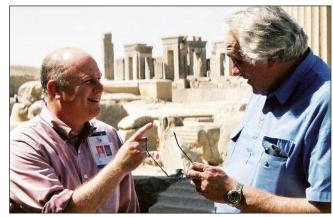
ICHO also is creating independent research institutes at specific sites, such as the

region around Persepolis and Pasagardae near Shiraz. The Pasagardae Research Foundation was set up in August 2001 and is funded to the tune of \$300,000 annually by a host of government groups. "We want to become a model for other major sites," says its director, M. H. Taliebian, who adds that he is negotiating joint efforts with the Louvre, the British Museum, and other foreign organizations. Japan and UNESCO helped conserve the Chogha Zanbil ziggurat starting in 1998 and set up the conservation lab at the site in southwestern Iran.

But competing fiefdoms inside and outside ICHO make for a fractured archaeology community here. Officials at the Bastan Museum complain bitterly that the new conservation lab being built across the street by another ICHO division excludes them. University officials chafe under ICHO control over all excavations. And the ministry's top-level control of the August conference alienated many archaeologists, several of whom boycotted the proceedings.

Now a government plan to merge ICHO with a tourism organization that reports directly to the president is raising alarms. The new Organization of Cultural Heritage and Tourism is expected to be announced shortly.

"If it is done as now planned, it will be an advantage to cultural heritage," says Gholshan. "But if ICHO is somehow subordinate to tourism, then it would be a disadvantage."



**Head to head.** Chicago's Gilbert Stein (left) and Harvard's Karl Lamberg-Karlovsky are jumping at the chance to return to Iran.

Much will depend as well on the director. Both foreign and Iranian researchers are hoping Beheshti will get the job.

Despite the internal wrangling, foreign researchers with experience in Iran aren't discouraged. "The conference is a good start," says Barbara Helwing of Berlin's German Archaeological Institute, who has several seasons at Arisman under her belt. "Just having scholars here to explain new ideas is

already very important." Still, she adds, "you can't predict anything here." And for those who want to start digging here, "you have to convince them; they aren't just throwing open the doors."

And there are good reasons to want to try. Dig permits in Syria and Turkey are increasingly difficult to obtain, and neighboring Iraq, Pakistan, and Afghanistan remain virtually off-limits to researchers. So even the hint of a welcome

mat in the region is drawing the avid attention of scholars. "It will all get going again," predicts Robert Dyson, a retired Penn archaeologist who spent his formative years in Iran. Adds Azarnoush: "There's plenty to do all over this country."

—ANDREW LAWLER

BRONZE AGE FIND

# Jiroft Discovery Stuns Archaeologists

Researchers had long suspected that a Bronze Age civilization flourished between Mesopotamia and the Indus River. Now a huge haul of stone vessels has pinpointed it to Jiroft

**TEHRAN**—Destitute villagers in southeastern Iran have uncovered what appears to be a Bronze Age civilization that flourished between ancient Sumer in Mesopotamia and Harappa in the Indus River Valley more than 4000 years ago. Scholars already had hints of a mysterious society in the region, but the new find nails down its heartland along the banks of the Halil River. The discovery of hundreds of stone vessels and massive architecture near the town of Jiroft opens a new chapter in Iranian and Middle Eastern archaeology. "From now on, we must speak of before and after Jiroft," says Harvard University archaeologist Karl Lamberg-Karlovsky.

But there are currently more questions than answers. Much of the evidence of this new civilization—hundreds of intricately carved stone vessels—is locked up in a regional police station after being seized as contraband from illegal digs. Scientific ex-

cavations have only just begun, and Iranian officials anticipate years of work involving an international team of researchers from many disciplines. But the revelation of a large and vibrant Bronze Age society is sending ripples of excitement through archaeological circles. "It is like a new Indus Valley, a new Nile Valley," Masoud Azarnoush, director of Iran's Archaeological Research Center in Tehran, said in an interview with *Science* in his Tehran office. "This new discovery puts Iran in the center of civilization and cultural activities in the 3rd millennium B.C.E."

This rich agricultural area north of the Hormuz Strait is bordered by deserts and is feverishly hot in the summer. But it seems that the ancient Jiroft people lived here in large numbers and specialized in making vessels covered in unfamiliar iconography and semiprecious stones. Made of chlorite, a

dark stone that is easy to carve but wears slowly, the objects portray a bewildering variety of plants, buildings, and half-animal, half-human figures including strange scorpion men and kneeling women be-

tween horned animals.
They also depict the outlines of monumental buildings resembling ziggurats, and archaeologists may be close to

finding examples of such buildings. The legal excavation conducted earlier this year at Jiroft exposed part of a huge building or fortress, 30 meters by 62 meters, protected by a massive wall, says Yousef Majidzadeh, the Iranian-born archaeologist in charge of the dig.

The vessels from around Jiroft are reminiscent of those previously found scattered throughout the region. "There was obviously tremendous cultural activity in this area, since small numbers of manufactured pieces similar to the ones from Jiroft are found over