

# Resuscitating Asia's Damaged Heart

After 2 decades of war, chaos, and fundamentalism, Afghanistan is reopening to archaeologists. But looting, mines, and lagging foreign support are putting the brakes on researchers' plans

**KABUL**—In a walled park overlooking the dusty ruins and bustle of Afghanistan's capital, a dozen men and women are searching on their hands and knees for ruins of another sort.

Children splash noisily in a nearby public swimming pool, seeking relief from the late-summer heat, as the team of German archaeologists along with Afghan colleagues and students excavate waterworks from a more graceful era. The octagonal 18th century pool they are uncovering was once part of an elaborate hillside royal garden in which the first Moghul emperor is buried. As digs go, this one is modest: a single long trench, a short 3-week campaign, and no surprising artifacts. But in another

sense, it is momentous. This excavation is Afghanistan's first legal dig in more than 2 decades.

A Soviet invasion and civil war, capped by harsh fundamentalist rule, has long excluded this country from archaeology's mainstream. But last year's overthrow of the Taliban reopened the borders to foreign scientists and provided hope for a new generation of Afghan researchers. Sadly, they cannot simply pick up where they left off in the late 1970s. During a recent visit to important archaeological centers around Afghanistan, *Science* found the country's once fine network of museums ransacked. Dozens, maybe hundreds, of important sites have been plundered and are still being systematically looted. The once respected community of Afghan researchers remains dispersed, their institutions in ruins; those who remain are focusing on survival rather than research. And foreign donors, despite extravagant promises, have been slow to respond to the crisis.

But Afghanistan exerts a powerful pull

on archaeologists. "There are so many important sites there; it is the junction of Iran, India, China, and the world of the nomads," says Paul Bernard, an archaeologist with France's CNRS research agency in Paris who led many expeditions throughout the country.

"It's the vital bit in the middle of the jigsaw puzzle of Asia," adds Norman Hammond of Boston University, who co-authored a study of Afghan archaeology just before the 1978 Soviet invasion.

Since then, archaeologists have more thoroughly explored neighboring countries, mapped ancient trade routes, and generally put Afghanistan into a wider context.

"Before, there was just this strange classical connection with Greece," says Fredrik Hiebert, an archaeologist at the University of Pennsylvania in Philadelphia. But recent Bronze Age finds suggest that the north might have been a center of early civilization contemporary to Mesopotamia and ancient Egypt (see sidebar, p. 1198). Looters have lately unearthed Buddhist cities in the east of the country which were part of kingdoms spreading the religion as far east as Japan in the first centuries A.D. To the south, unexcavated mounds are thought to hold answers about the reach and scope of the Indus River Valley civilization in the third millennium B.C. This potential wealth of scientific data has many archaeologists itching to return, although most remain wary of the dire conditions.

And there is no shortage of local enthusiasm for archaeology. The classrooms and halls of Kabul University were filled with students studying history and archaeology during a recent visit, and the new government is eager for outside researchers to start

work. "We welcome foreign excavators," says Farid Haidari, an official with the Ministry of Culture and Information, which authorizes digs. So far, the foreigners who have trickled in have been impressed. "I was totally overwhelmed and positively surprised," says Ute Franke-Vogt of Berlin's German Archaeological Institute. She led the roughly \$200,000 dig at the walled park, called Bagh-e-Babur, in Kabul—an effort designed largely to acquaint Afghans with modern scientific techniques and to provide them with basic supplies such as computers, tents, and excavating equipment. "It was quite easy to do our work."

Outside the relative security of the capital, however, the challenges are formidable. Even the area around the ruined Institute of Archaeology building—a scant 10 kilometers from Kabul—is said to be heavily mined, although one former Afghan scientist, Zemaryalai Tarzi, who is now at the University of Strasbourg, France, says he did manage to reach the institute last month to retrieve several tons of pottery shards. Armed bandits roam the cratered roads linking the handful of large cities, fresh water is often difficult to obtain, and major portions of the countryside have yet to be demined. "My Afghan colleagues don't walk around a lot," says Franke-Vogt. Given the mine problem, she adds, "you could never do a full survey of the country."

## Fear and suspicion

Afghanistan, though poor and fractured today, has a richer past than almost any place on Earth. More than 4 millennia ago, lapis



**Hollow victory.** After decades of fighting, Kabul's Institute of Archaeology is just a shell.



**Starting over.** Germany's Ute Franke-Vogt prepares Afghan researchers with donated equipment.

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lazuli made its way from the mountainous northeast to distant Sumeria in modern-day Iraq. Alexander the Great's armies introduced coins and new artistic styles. The Silk Road, a trading route from Italy to Japan,

life and took their religion, poetry, and architecture southeast through the Khyber Pass to the Indian plains.

The local inhabitants and the traders, soldiers, nomads, pilgrims, and priests who traversed this harsh desert and mountain country left behind one of the world's most complex weavings of human culture, reflected in Buddhist figures in Greek robes and Chinese-influenced Hindu statues. Some Afghan tribes continued to use coins stamped with Alexander's profile as late as the 20th century, but it wasn't until the 1920s that archaeology began to uncover the long-hidden ingredients in Afghanistan's mixing bowl. Led by French researchers, who secured a monopoly on digging for several decades, scientists amassed a wealth of data and artifacts from a stunning cross section of history, from Paleolithic tools to fine Islamic pottery.

Some of that material collected in the half-century before the Soviet invasion survives in Paris's Musée Guimet, the Afghanistan Museum in Bubendorf, Switzerland, and other places safely beyond Afghan borders. But most of it was held either in the National Museum in Kabul or in the regional museums. The destruction of the Kabul collection is well documented (see p. 1202), but the fate of the regional museums and their collections has been unclear until now.

At Herat, an ancient city near the Iranian border, empty display cases sit outside the locked and abandoned museum. A broken stone fish lies beside the padlocked door, testament to the Taliban decree that human and animal representations are blasphemous. "The Taliban broke the statues, but we have some books and pictures," says Mohammad Fayuq, an official with the provincial cultural heritage office.

At Kandahar—a corruption of the name Alexander—the museum is equally bare and desolate. "It was all taken away, some by the mujahideen, and then the Taliban took the rest," says Mohammad Shoaib Waba, deputy governor of Kandahar province. The ruins of nearby ancient Kandahar also appear heavily damaged by fighting during the civil war.

Between Kandahar and Kabul lies Ghazni, a city that has undergone many transformations

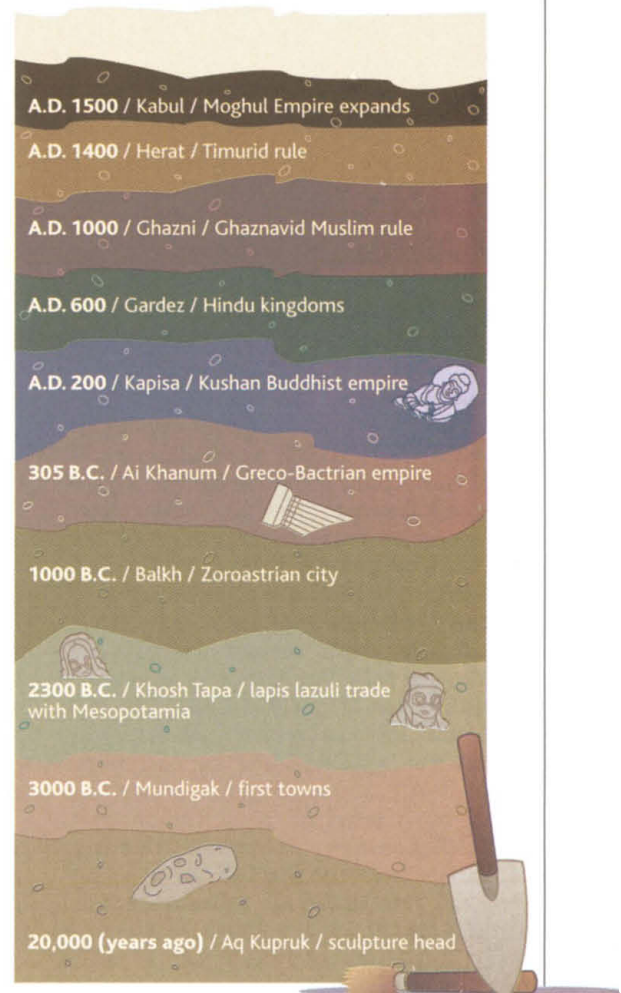


**Deskbound.** Institute of Archaeology Director A. Wasey Feroozi lacks money and bureaucratic pull.

brought Roman glass and Chinese ceramics; Genghis Khan brought destruction. It was also a marketplace of ideas. Zoroastrianism spread west from here, and centuries later a revitalized Buddhism spread east. Islamic rulers created a rich artistic and intellectual



**Charting destruction.** All of Afghanistan's major museums were looted, as were the country's major archaeological sites, including at least two previously unknown Buddhist towns. Right, Afghanistan's past includes a bewildering array of cultures and empires stretching back thousands of years.





## Unanswered Questions of Afghan Archaeology

The Soviet invasion in 1978 put an abrupt brake on many promising lines of inquiry in Afghanistan. Here are a few of the areas researchers hope to revisit with their new access:

- At the time of the Soviet invasion, Viktor Sarianidi of Moscow's Institute of Archaeology, among others, had just found intriguing evidence of substantial settlements in the country's north, near the Amu Darya River—the ancient Oxus—during the 3rd millennium B.C. Further digging in

Uzbekistan and Turkmenistan revealed similar patterns. When those republics became independent in the early 1990s, more researchers rushed in to examine the new culture, which was awkwardly dubbed the Bactrian-Margiana Archaeological Complex. (Bactria is in modern Afghanistan, Margiana in today's Turkmenistan.)

With a distinctive architecture of high walls and turrets, intricate metal work, cylinder seals, and ceramics, this complex "had everything that Mesopotamia had except literacy," says Harvard University

**Lost and found.** Police recovered this Buddhist head looted from a vast site near Harwa.

archaeologist C. C. Lamberg-Karlovsky. During its heyday from about 2200 B.C. until 1700 B.C., "this really was at the level of civilization," he adds.

Some Russian researchers believe that the settlements were the source of one or maybe two waves of Aryan invasions of India, although many scholars are skeptical of this theory. Further excavations in Afghanistan could provide critical data and even pinpoint

the heartland of this civilization, which sprawled across the vast Asian steppes and has echoes as far away as Susa in western Iran and in the northwest of China.

- In eastern Afghanistan near Harwa, looters have uncovered rich sites dating from the Buddhist kingdoms in the early centuries A.D. Border guards recently intercepted a host of Buddhist objects from the 2nd to 5th centuries A.D., and their source was traced to a remote part of Logar Province southeast of Kabul. Earlier this fall, archaeologist Giovanni Verardi of the University of Rome visited the site, which he says is full of imposing and well-preserved two-story buildings, towers, and sacred precincts. Although looters—who some officials say were working with the blessing of the Taliban—have dug passageways through the mound, causing extensive damage, Verardi says that much remains to be excavated. "It is an enormous site, covering an entire valley of around 30 square kilometers," says Jim Williams of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), who recently visited the area.

Two soldiers have been dispatched by the provincial governor to guard the vast site, but Verardi notes that they likely will have little effect. The local area is under control of what he calls a "powerful personage," a euphemism here for an opium smuggler with a private army. Legal digs here would face other hurdles, such as the extreme isolation of the site, adds Verardi. John Francis of the National Geographic Society in Washington, D.C., says that his organization has asked Verardi to submit a research proposal for site excavation.

- Other sites that have come to light through looting, according to Williams, include one north of Kabul near Kapisa, once the center of a powerful kingdom led by Kanishka. Kanishka is credited with transforming Buddhism, which was dying in India, into a dynamic religion centered on the figure of the Buddha himself, who previously had been represented by symbols such as a wheel. The revitalized Buddhism spread rapidly north and east on the Silk Road to China and Japan. How this took place, and in what political context, is still not well understood. By the 5th century A.D., these Buddhist Afghan kingdoms were destroyed by Hindu incursions from the east and by Arab armies carrying their new creed of Islam. Scholars are excited about the prospect of new data on this era.

—A.L.

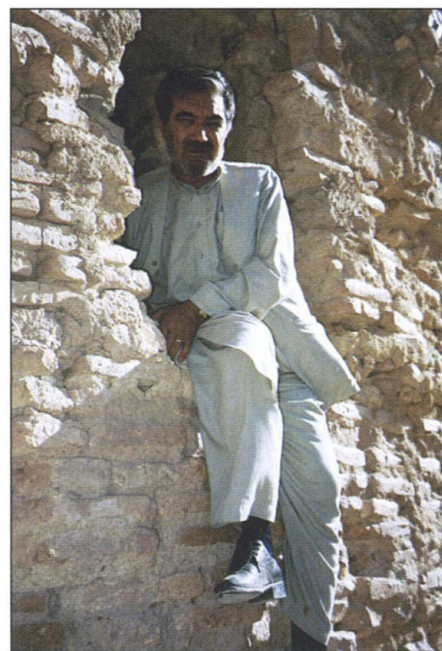
tions. Once a thriving Buddhist center, it later became the capital of the 11th century Ghaznavid kingdom—which first took Islam to India—and then a ruin after Genghis Khan passed through. Ghazni officials said that the museum here was badly looted, and one official unwrapped a checkered kaffiyah kept in his desk drawer to show the jumbled pieces of an ancient terra-cotta Buddha. But a few artifacts escaped the destruction. Giovanni Verardi, an archaeologist at the University of Rome, gained access to the locked museum building for several weeks in September and discovered numerous boxes with intact Buddhist sculpture in the chaotic mess.

Other museums—such as Balkh in the north and Jalalabad in the east—were also looted, Afghan and Western sources say. But some material, as in Ghazni, will doubtless reemerge. Some cultural heritage officials "are very afraid of telling people of the real situation," explains Verardi. "They are suspicious and fear the mullahs" who might object to exhibition of human and animal forms.

Archaeological sites outside the large cities have also been badly pillaged, says A. Wasey Ferooz, director of the Institute of Archaeology, which is now housed in a Kabul villa. "Our highest priority is to stop illegal excavations in Afghanistan," he says. "Many important sites—even in Kabul Province—in the last decade have been illegally excavated by [military] commanders with the cooperation of some foreigners."

For example, a rich Buddhist site outside Ghazni called Tepe Sardar was shorn of its exposed buddhas and monastery remains by the Taliban, and the hill was turned into a military post with machine-gun emplacements. Guards remain, although the Ghazni governor maintains that the current soldiers are there to protect the site from looters.

Such protection is rare. Ai Khanum—a principal city of the Bactrian empire, which arose after Alexander—has been almost completely annihilated by looters. "Even the shards were destroyed" when looters stole the shelves they were stored on, says Bertille Lyonnet, a CNRS archaeologist in Paris who



**Hard place.** The ministry's Mohammad Qadeer Qadrdan says foreign support is slow in coming.

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worked the site in the 1970s. The Buddhist complex of Hadda near Jalalabad, known in antiquity as the city of 1000 stupas, or domed shrines, was devastated during a battle between Soviets and locals. "It's totally destroyed," says Feroozi. Even halting plundering in the area around Kabul is impossible, he adds, without funds for guards or help from the police or army.



**Forbidden.** The Taliban smashed this ancient stone carving in Herat.

### Slow-motion rescue

At an emergency meeting in Kabul in late May, archaeologists, preservationists, and government officials from around the world agreed on a plan to start rebuilding Afghanistan's cultural heritage. Foreign governments pledged a total of about \$7 million to restore the shattered National Museum, rescue damaged artifacts, and consolidate endangered sites.

But behind the optimistic press releases, the plan is in trouble. United Nations Educational, Scientific, and Cultural Organization (UNESCO) and Afghan officials complain that many of the grand promises have not been met. "I have no money, though every country says 'I will give you some,'" says Mohammad Qadeer Qadrdan, director of the Ministry of Culture and Information's historical monuments section. "The major problem now is getting donor governments to come through with their funds," adds Jim Williams, a UNESCO official based in Kabul. For example, Greece pledged \$750,000 for a new roof and windows to be installed at the museum this summer, but with winter closing in, work has yet to begin. This delay infuriates representatives from other organizations, who say the museum project is critical for housing the endangered collections. Greek officials declined to comment.

Other nations have honored their pledges. Italy has already allocated \$500,000 of its promised \$800,000 for work on the minarets of Jam and Herat—with the balance to come next year—and has promised a total of \$3 million. Germany will provide \$875,000 in 2002, a portion of which was used for the Bagh-e-Babur dig and to donate equipment. UNESCO's Christian Manhart says Germany intends to match that amount next year. And Switzerland set aside \$130,000 for Jam. The U.S., by contrast, so far has only set aside \$37,000.

Japan, which is particularly interested in the Bamiyan Valley with its Buddhist heritage, is spending \$700,000 on that region (see p. 1204), and it might double that figure.

And France, which has had a long-standing archaeological relationship with Afghanistan, intends to roof a 9th century mosque in Balkh; it also recently set up a French mission based in the country led by Roland Besenval,

a respected archaeologist with extensive experience here. Their first task, says CNRS's Bernard, is to reopen an archaeological library in Kabul that once was Central Asia's finest.

Some of this government funding is being channeled to nongovernmental organizations (NGOs), which are also bringing their own resources to the table. The Geneva-based Aga Khan Trust for Culture, for example, pledged \$5 million for a variety of heritage projects. Wealthy individuals are also getting involved, such as Japanese artist and administrator Ikuo Hirayama, who recently visited Kabul and Bamiyan to determine where to put a substantial amount of money. "He's now planning to build a research institute in Kabul, specializing in archaeology, culture, and traditional art," says Kazuya Yamauchi, an archaeologist at Japan's Wakao University who traveled with Hirayama.

## Fate of Tilya Tepe Remains a Mystery

**KABUL**—Ask the whereabouts of one of the most dramatic archaeological discoveries of the 20th century, and Afghan government officials start to look uncomfortable. In 1978, at an ancient grave site in the country's far north, Soviet archaeologists turned up more than 20,000 gold artifacts ranging from small plates to elaborate crowns and weighing a total of 22 kilograms. These objects, known as the Tilya Tepe find or the Bactrian treasure, were worked between 100 B.C. and A.D. 100 in unique styles echoing cultures between Greece and China. Although Kabul is rife with rumors on its location, the collection's fate remains a mystery.

Some fear that the important find is irretrievably lost, along with the Begram ivories, exquisitely carved objects in a Hellenistic and Indian style, and the marble statues and elaborate jewelry from Ai Khanum, where Alexander the Great is thought to have wed Roxanne, the daughter of a local chieftain.



**Golden days.** This 2000-year-old gold clasp mixes Greco-Roman and Siberian-Altai styles.

The Tilya Tepe gold was brought to Kabul shortly before Soviet tanks rolled into the city. Omar Khan Masudi, director of the National Museum, says that the Soviets promptly turned over the find to Afghanistan's Institute of Archaeology, which shortly after gave the artifacts to the museum. In 1991, as mujahideen factions closed in on the capital, the collection was transferred to the relative safety of the city center, where it was briefly shown that July to the diplomatic corps. "After that, we don't know anything about it," Masudi says.

Other Afghan officials and knowledgeable Western sources say that the gold was secreted deep in a steel vault in Kabul's presidential palace, and that it was there when the Taliban captured the city in 1996. Still others say it was taken north with the retreating army, hidden in the Ministry of Culture and Information, or melted down by the Taliban. Afghan officials decline to say if the material is still here, and the topic clearly makes them uneasy. Although some objects resembling pieces from the collection have appeared on the international art market, none have been identified as part of the Tilya Tepe find. And Masudi notes that the mound itself might have yielded treasure to looters in the intervening years. The Soviets, he says, "opened six graves, and there must be more. It was wintertime, and they didn't follow it up."

Viktor Sarianidi, the archaeologist from Moscow's Institute of Archaeology who led the original dig, recently wrote that "we know nothing definite" about the fate of the Tilya Tepe finds and urges a worldwide campaign to search for and preserve the objects. —A.L.



This piecemeal approach, however, has sown a good deal of confusion and backbiting. A few Afghan officials complain that German money for survey work at Bagh-e-Babur was funneled to the Aga Khan Trust rather than to their government. UNESCO officials complain that some NGOs refuse to coordinate their efforts, whereas NGO representatives accuse UNESCO of being too slow and bureaucratic. "Coordination is a problem; everyone is trying to guard their own projects," sighs A. W. Najimi, a consultant with the Aga Khan Trust. "And everyone is trying to attract donors."

Meanwhile, Afghan officials are trying to put their own house in order. In August, the government folded the Institute of Archaeol-

ogy, which had been part of the moribund Academy of Sciences, into the Ministry of Culture and Information. "It's a bad idea," says Feroozi, who worries that the ministry won't understand the need for research. But he hopes the move will pave the way for a budget that will allow him to protect important sites—and eventually to dig again.

That eagerness is palpable. "I'm amazed by their desire to work and to learn under such difficult circumstances," says CNRS's Lyonnet, who this spring helped reorganize the chaotic collection of pottery shards in the basement of the National Museum. That desire extends to a new generation. Assmatullah Osmani, an archaeology professor at Kabul University, estimates that one in 10 of the 500

students who have just begun their studies in the arts and sciences departments are interested in pursuing history and archaeology.

Some got their first taste of practical experience this summer in Bagh-e-Babur. Such experience is critical for a country where an entire generation was denied education and where textbooks and other educational equipment are scarce. "In this field, you have to show how to do things anyway, not teach from books," says Franke-Vogt, who worked with 30 Afghan students and researchers. "And we are developing a very good collaboration." She returned last month to Kabul to continue the dig. That modest start is the first step to placing Afghanistan back in the center of the Central Asian puzzle. —ANDREW LAWLER

## NEWS

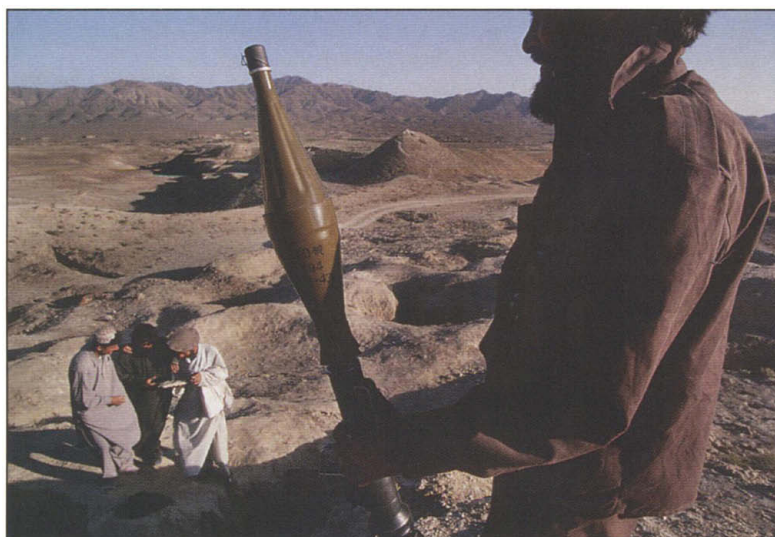
## To Dig or Not to Dig?

Archaeologists and cultural heritage experts are struggling with how and when to reopen excavations amid security and storage concerns

**KABUL**—In the late 1970s, Afghan archaeologist Zema-ryalai Tarzi believed that he had pinpointed the site of a huge, long-buried Buddha in the famous Bamiyan Valley. But in 1978, before he could start digging, Soviet tanks rolled into Afghanistan, and a year later Tarzi was smuggled out of occupied Kabul in the trunk of a car. The defeat of the Taliban last year was his dream come true. Last month Tarzi, now a professor at the University of Strasbourg, France, was back searching again in this mountainous area north of Kabul.

The dig was cut short by local politics—Bamiyan's military commander ordered Tarzi to halt work after only 3 days. Many cultural heritage experts breathed a sigh of relief. They feared that the planned excavation was too risky and ambitious. But Tarzi says that Bamiyan's government has invited him to return next summer, and he won't be alone. Foreign archaeologists are plowing ahead with dig plans for next year: Tarzi and maybe a Japanese team at Bamiyan, an Italian team at Jam in the central mountains, a German team at Kabul's Bagh-e-Babur, and possibly French teams in the north and west.

Denied access for 2 decades, archaeologists are understandably excited about returning. But many international experts worry about the rush. They argue that it is



**Under fire.** A guard watches over this ancient Buddhist site—30 square kilometers in extent—in eastern Afghanistan, only discovered because of looters.

much too early to start excavating at important sites like Bamiyan in a country that remains politically unstable, strewn with mines, and woefully lacking in storage facilities. "It's madness," says Nancy Dupree, a longtime expert on Afghanistan's cultural heritage who lives in neighboring Pakistan. "Once you dig, people will loot. After excavating for 3 months of the year, you go away, and you leave it laid bare." Paul Bernard and Bertille Lyonnet, archaeologists with France's CNRS research agency based in Paris, worry that digging is a distraction from more pressing tasks, such as restoring the museum and educating researchers. Adds an irritated Michael Petzet, president of the Paris-based International Council on

Monuments and Sites: "Everything underground should be left underground. Let's preserve what's left rather than dig up anything new."

Tarzi responds that if professionals don't dig first, the looters will. "It's important to anticipate and get there before the looters,"

he says. And although many researchers question the wisdom of launching major excavations, most concede that going ahead with a small number of carefully chosen professional digs makes sense. At Jam, for instance, extensive looting is well under way in an area never touched by archaeologists (see p. 1201). Well-known sites such as Ai Khanum in the north—a Greco-Bactrian metropolis—already are devastated by plundering. And a series of stunning new finds from Afghanistan's long Buddhist era have recently come to light as a result of looting

(see sidebar, p. 1198). In the Kabul region, Dupree acknowledges that salvage work is desperately needed where new construction threatens many important sites.

Such excavations—if done thoughtfully—could begin the vital work of building trust with local villagers, through the hiring of workers and guards providing much-needed employment, and by restoring a sense of common heritage. In the past, notes Giovanni Verardi, an archaeologist at the University of Rome, there was never large-scale looting here. In this light, "the assistance of foreign missions likely would be useful."

Provincial governors and officials at the Ministry of Information and Culture,

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