British archaeologist. "They've got their foot in the door."

For the time being, Gibson is cooling his heels in Syria, just 8 kilometers from the Iraqi border, where he has been digging at an ancient site at Hamoukar. But he yearns to return to Nippur, in southern Mesopotamia. In 1990, he had just uncovered a temple to Gula, goddess of medicine, when the Gulf War broke out. He had planned to excavate both the temple and its neighborhood to understand their relationship. "We left in late March of 1990, intending to come back in a few months," he says. The site survived both the war and the subsequent chaos unscathed. But in 1994 Gibson learned that part of his dig house had been torched during a local tribal dispute. Although he has returned to visit the site several times, he cannot fix the dig house roof, much less excavate, until the United States eases its stance on Saddam's regime.

Iraq's loss has been two other countries' gain. Without access to Iraq, Americans like Gibson as well as Europeans have done a good deal of work in Turkey and Syria in recent years. And it has produced significant results; the archaeologists have identified towns and cities of the 4th and 3rd millennia B.C. that were larger and more complex than previously known.

But Iraqi archaeologists are confident their colleagues eventually will all return from the rim to the heartland of Mesopotamia. "The American and British groups working in Syria and Turkey will finish up and come back to Iraq again," predicts Muayad Damerji, antiquities counselor to the Ministry of Culture. "They will come back, I am sure."

-ANDREW LAWLER

### ARCHAEOLOGY IN IRAQ DIGGING IN

# New Digs Draw Applause And Concern

Iraqi archaeologists are back in the field and making significant finds. But Western researchers worry about their methods after years of isolation

**UMM AL-AQIRIB**—Iraqi archaeologists working last year on an ancient Sumerian site in this remote area in southern Iraq heard a rumor that looters were ready to pounce as soon as work stopped for the summer. So they took no chances. The researchers and a team of 30 local diggers worked straight through the ferocious summer, enduring temperatures that regularly soared past 50 degrees Celsius.

Their efforts paid off: The excavators uncovered a rare cemetery, a huge complex of buildings in an unusual configuration, and a 7-meter-high wall in remarkable condition—all of which challenge current assumptions about city development in the 4th and 3rd millennia B.C. "It's astonishing," says McGuire Gibson, a University of Chicago archaeologist. These findings "will rewrite the history of architecture in ancient Mesopotamia."

Gibson was part of a team of Western researchers visiting Iraq this spring, the first such group to size up some of the 15 Iraqi excavations begun in the past 18 months after nearly a decade's hiatus. A new generation of Iraqi archaeologists has fanned out to six sites in the south, five in the north, and four in the area around Baghdad—mostly places threatened by looters, irrigation-canal construction, or the rising waters of new dams.

New finds such as those at Umm Al-Aqirib—"Mother of Scorpions" in Arabic and nearby Djokha are causing ripples of excitement among Near Eastern specialists. But Western scientists also worry that their colleagues' economic troubles, long isolation, and emphasis on restoration—trying to reconstruct ancient sites rather than simply preserving what remains—may pose a threat to important and fragile ruins.

At Al-Aqirib, which comprises 5 square kilometers of sand dunes, the team led by Iraq antiquities research director Donny



**Fine work.** Iraqi excavators at Ashur, left. At Djokha, Nawala Al-Mutawalli has found unusually good building methods.

George excavated a palace or administrative building from the 3rd millennium B.C. that is 50 meters square. Jars in the structure still contained the residues of wheat and barley. Nearby, the team has uncovered what appears to be a temple, 38 meters by 28 meters with a 7-meter-high wall, that may date to before 3000 B.C. and that is nearly flush against the base of a platform or ziggurat an unusual arrangement for that period, says George. On the other side of the platform is a large area of graves dating from roughly the middle of the 3rd millennium B.C.

The extent of the cemetery, which has been partially looted, remains uncertain, but excavators have opened 18 graves so far and

> generally found either one stone or one copper bowl next to human remains. In the tomb of one woman, apparently someone of means, were 46 pieces of lapis lazuli. Although Mesopotamian burials typically were under homes, one British scholar speculates that Al-Aqirib was a Sumerian religious center and therefore a popular burial place. Other



## Rifle-Toting Researcher Fights to Protect Ancient Sites

**BAGHDAD**—Early one morning at the end of the Gulf War, Donny George was driving home to Baghdad after examining the ancient city of Hatra for signs of bomb damage or looting. A couple of allied jets roared over his car; the Iraqi archaeologist thought nothing of it until minutes later, when he came upon the bullet-pocked wreckage of a group of vehicles attacked by the same planes.

George has had more than his share of such Indiana Jones-style

adventures. He kept a constant vigil at the Iraqi Museum in Baghdad during the Gulf War, catching a nap in the cellar in between air raids; he organized opposition to the truckloads of armed looters who scoured the countryside in the mid-1990s; and he later survived a brutal assault by an unknown assailant. All the while, George has played a critical role in keeping his field alive during a traumatic time. "He really has been cradling Iraqi archaeology for years," says Michael Müller-Karpe, an archaeologist at the Römisch-Germanisches Zentralmuseum in Mainz, Germany, who has known George for some 25 years. "Archaeology owes a lot to him."

George, 50, started his career working in the museum

storeroom; recently, he was named director general of research and publications in the newly created State Board of Antiquities. In that capacity, he is overseeing a series of new excavations, struggling to revive scholarly publications and conferences, and encouraging a new generation of researchers to enter the field. His fluent English-his father was an accountant at the British consulate-and skills at cutting red tape have been major factors in easing the return of foreign excavators.

A senior member of a northern tribe, George earned all his degrees in Baghdad; his Ph.D. was on grave goods from a 6thmillennium-B.C. site. Later he served as field director at Babylon and then as the scientific and technical assistant to the chief of the old department. In the past



Target. Donny George has had narrow escapes in the course of duty.

decade, however, he has had little time to dig and do research. Instead, his job has been a study in continual crisis management.

In 1991, he helped organize the massive effort of boxing and storing the thousands of antiquities in the Iraqi Museum prior to the Gulf War; he and colleagues remained in the museum. "We had 24-hours shifts, and every night there was bombing," he says.

After the bombing period ended, George immediately set out for places like Hatra—a Roman-influenced city built of stone in the first centuries A.D.—to examine potential damage. Looting of regional museums was widespread, and some museum personnel were killed in the Kurdish north and Shiite south. Then came devastating inflation. The bulk of Iraq's archaeologists, facing drastic reductions in their real income, fled the department for jobs elsewhere; even paying for guards was difficult. Excavation work was at a standstill.

By the mid-1990s, looting was rampant at remote sites. In one unexcavated Sumerian city, George says, "a large force of some 50 to 70 looters appeared, and there was a full day of fighting between our government forces and the looters." At Larsa, an ancient site dug by French researchers, a guard was killed in a similar fight. And a guard at Warka (ancient Uruk) killed a looter. "I'd say we've

initial initia

had a dozen of our people injured and killed in these fights," he adds.

George himself was likely the victim of a looter reprisal. Coming home from work one night, he was struck three times with a blunt object. The assailant made no attempt to steal his wallet or car but fled when George-who is short but burly-resisted. He recovered with 14 stitches to his head. George's colleagues, both Iraqi and foreign, say there is little doubt his antilooting policies antagonized the organized groups who had en-

joyed a largely free hand for years.

Shortly after that 1999 attack, and with reluctant approval of the presidential palace, George and some of his colleagues began to dig at a few remote looted sites to recover what they could while discouraging further damage. There was no resistance-thanks in part to careful diplomacy with the local sheiks who have day-to-day control over the rural areas of Iraq. "We've managed to maintain very good relations with the sheiks," says George. "We visit and talk frequently with each other; when they have funerals we go and pay respects. Sometimes people come from outside the area and test our control, and of course we have 24-hour armed guards, and I also have 'ears' in the area." George himself kept a Kalashnikov rifle handy during a recent visit to the south.

His local sources tell him that the looters have given up where the government has re-

asserted a presence. "The dangerous part is that they simply switched to other sites," he says. "But it's tough; we can't dig everywhere." Meanwhile, new digs have begun, including his own at Umm Al-Aqirib (see p. 38), and he is training a new generation of researchers—which boasts a high percentage of young women to assist in the work. And he hopes to increase his department's research credibility by expanding its number of publications.

"He's effective," says Müller-Karpe. "And if there's a problem, he solves it."

-A.L.

### **NEWS FOCUS**

archaeologists agree that the site raises a host of provocative questions. "They have a real puzzle on their hands," says Gibson.

That is true at other sites as well. At Djokha, for example, about 7 kilometers away, archaeologist Nawala Al-Mutawalli is excavating a site, nearly devastated by looters, that was a major urban center from the end of the 4th millennium to the beginning of the 2nd millennium B.C. She has uncovered temples and homes, mostly from the 2nd and 3rd millennia B.C., made with an unusually large number of baked bricks mud bricks were the more common and cheaper alternative—with valuable bitumen mortar that came from distant northern Mesopotamia. "These are unusually high building standards," she says. "You usually



**Sumer surprise.** This complex unearthed by Donny George's team astonishes Western researchers.

find such techniques mainly on ziggurats."

In the north, an Iraqi team is busy uncovering mansions on the southern side of the old Assyrian capital of Ashur that date to around the 8th century B.C. During a recent visit, more than a dozen workers had just uncovered courtyards paved with patterns of small stones on top of sophisticated drainage systems. Digging at the site began in 1999, also to ward off looters.

With the area now secure, a German team plans to start its own digging this fall on the western side of the site (see p. 36).

Iraqi archaeologists are also desperately trying to explore sites threatened by irrigation and dam building. Thus archaeologist Fawziwa Al-Maliki, for example, has hastened to begin surveying Habil Ibrahim—a legendary home of Abraham north of Mosul which is threatened by canal building and farming. And at Tell Al-Namil, also in the north, archaeologist Burhan Shakir is excavating a site that has already suffered at the hands of local villagers but is now threatened by the rising waters of a nearby dam. An unusual circular building with a series of walls includes a main entrance that boasted a 4-meter-wide arch, a spiral staircase, and a brick well; a nearby cemetery has 220 graves. The complex dates to about 2900 B.C.

### **Conserve or preserve?**

Although impressed by the initial work of these and other young Iraqi archaeologists, several Western researchers worry that a new generation of excavators lacks education in current methods and technologies.

They also fear that the new digs could leave little funding for less glamorous efforts, such as object and site conservation. And they remain wary of the Iraqi tradition of site reconstruction at places like Babylon and Hatra.

The reconstruction at Babylon during the 1980s, for example, placed new walls on old and unstable foundations sitting on a rising water table. UNESCO officials say they rejected an Iraqi attempt to place Babylon on a list of world heritage sites because, in their view, it was compromised by the rebuilding effort. The effects of such reconstruction are most visi-

ble at Aqar Quf, a ziggurat outside Baghdad, where the new bricks on the old base are collapsing.

There is also an absence of specialists to care for what is uncovered. "There are no trained conservators in the country," says one foreign archaeologist. He notes that although a German institute has offered to train Iraqi conservators and cover their expenses, it has gotten few takers. "There's an attitude that you don't want



**Shaky foundations.** Poor restoration work at the Aqar Quf ziggurat near Baghdad has deteriorated quickly.



**Babylon rising.** Saddam's government has poured funding into questionable reconstruction.

to stoop to preservation and conservation," he adds. And the internal problems with publishing and communicating Iraqi efforts to the outside world only increases Western worries. "If you don't publish, you are just plundering," says one Western researcher.

George dismisses these worries as overblown. A recent spate of conferences, books, and journals is easing the isolation, he says, and students in the field are carefully trained and monitored by their elders. "They work 24 hours, drawing, digging, cleaning, gluing, restoring," he says, noting that four or five people have been sent to Germany to learn the latest conservation techniques, and others are planning to make the same trip.

As for restoration, George has sharp words for Western critics. "A lot of people would like ruins to stay ruins," he says. "But whenever a central government was strong and wealthy, it restored and rebuilt the ancient cities—it's a long, long tradition going back to Sumerian times." That tradition indeed dies hard. One senior Iraqi official recently sought advice from foreign archaeologists on rebuilding the famed tower of Babel, now surrounded by a swamp.

Such proposals clearly appeal to President Saddam Hussein, who ordered that every new brick at Babylon be stamped with his name and who has built his own sprawling palace there. But after 2 decades of war and economic hardship, such ambitious and inherently costly schemes seem unlikely to go forward. **–ANDREW LAWLER**