Palestinians Inherit Riches, But Struggle to Make a Mark

Denied for 3 decades the right to dig in their own land, Palestinian archaeologists are now only held back by a lack of cash and training

WEST BANK AND GAZA STRIP, PALESTINE-

Khirbet Siya, a craggy mound nestled among austere orange hills near the West Bank town of Birzeit, might not seem the most auspicious site for an archaeological dig. What remains of a Byzantine village has been badly scarred by looters, who over the years have eaten away at the mound looking for ancient treasures. But

for Hamed Salem of the Palestinian Institute of Archaeology in Birzeit, it is an opportunity he had been waiting for since the early 1980s. Last July, with the aid of students from Birzeit University, the United States, and Europe, Salem began excavating at Khirbet Siya—the first dig he has directed since becoming an archaeologist nearly 20 years ago. Among the discoveries are a giant olive press and traces of one of the oldest Byzantine churches ever found in Palestine.

Until 5 years ago, when Israel began ceding parts of the territories occupied during the 1967 Arab-Israeli War to the Palestinians, local archaeologists were rarely allowed to excavate in the West Bank and Gaza, which were under military jurisdiction. But after the creation of the Palestinian National Authority (PNA) in 1994, Palestinians soon found themselves in possession of thousands of archaeological sites. Many are of major im-

portance, such as Tel es-Sultan in Jericho and Deir el-Balah south of Gaza City, which during past excavations have revealed important insights into the Neolithic and Bronze Age peoples that once inhabited this land. For Palestinian archaeologists, this sudden embarrassment of ancient riches is both a blessing and a curse: Although they are thrilled at the chance to dig at last in their own land, lack of funding and trained excavators means they can often do little more than protect and preserve the sites from falling into ruin or the clutches of looters.

"We are starting completely from



Canaanite coffins. These 14th century B.C. clay sarcophagi were found at Deir el-Balah on the Gaza Strip.

scratch," says archaeologist Adel Yahya, director of the Palestinian Association for Cultural Exchange. And as Palestinian archaeologists enjoy their newfound freedom, they are struggling to define their own research priorities and to avoid allowing archaeology

to serve political and religious ideologies— a trap many of them believe Israeli archaeologists often fell into (see p. 29).

Their first priority is money. The Palestinian Department of Antiquities based in Ramallah—which was also created in 1994—currently receives only \$500,000 annually from the PNA, according to department chief Hamdan Taha. And although contributions from outside donor countries, such as the Netherlands and Italy, have swollen the total department budget to several million dollars each year, nearly all of this money goes into restoring and protecting archaeological sites rather than research. "The major task of the department is rescue archaeology," says Taha. "Many sites were left as they were

in 1967, and others have been excavated and then abandoned. Thousands of sites have been plundered and looted."

The lack of funds for research digs is very unfortunate, archaeologists say, because the thousands of sites now under Palestinian control represent a treasure trove of potential new information. "This is one of the richest archaeological areas in the world," says Joanne Clarke, director of the Jerusalem office of the Council for British Research in the Levant. This is especially true of the Gaza Strip, a major crossroads of the ancient Near East. And yet, Clarke says, the Gaza area "is almost completely untouched" by archaeologists. Clarke and the council are now teaming up with Palestinian antiquities authorities to excavate a number of Bronze Age settlements in Gaza, which were home to the Egyptians, Philistines, and Canaanites who vied for control of this region in

ancient times.

Like the Gaza project, nearly all research digs currently under way here—such as new excavations by an Italian-Palestinian team at Jericho and Dutch-Palestinian explorations of an extensive Canaanite water system at

Artifacts Prompt Tug-of-War

Now that the Palestinians finally have control over their archaeological heritage, they are furious over Israel's refusal so far to return the countless artifacts—pottery, grave goods, inscriptions, jewelry, and so on—that were uncovered during Israeli excavations in the occupied territories over the past 3 decades. This refusal, they argue, is against The Hague Convention of 1954, which they believe prohibits excavations in captured territory by an occupying nation. During peace talks between Palestinians and Israelis since the Oslo Accords of 1993, Palestinian negotiators have brought up this issue repeatedly, only to be rebuffed. "We were prevented from excavating here, we were prevented from visiting archaeological digs, and now all the artifacts have been exported to Israeli museums," says Moain Sadek, head of the Department of Antiquities' operations in the Gaza Strip, who

together with department chief Hamdan Taha has been involved in direct negotiations with the Israelis on the issue.

But the Israelis counter that The Hague Convention does not apply to the West Bank and Gaza, because these territories—which came under Jordanian and Egyptian administration after the Israeli war of independence in 1948—were not part of any nation at the time the convention was signed. "Should we give the Dead Sea scrolls to Arafat?" asks Amir Drori, director-general of the Israel Antiquities Authority, who at times has sat at the same negotiating table with Taha and Sadek. "When we made peace with Egypt, we returned all artifacts we found in the Sinai. And if we make peace with Syria and return the Golan Heights, we will have to follow The Hague Convention there as well. But the picture is not the same in [the West Bank] and Gaza. No one knows who was the legal ruler there—Israel, Jordan, Egypt, the British under the mandate, or the Ottoman Turks."

Khirbet Belameh, near the West Bank city of Jenin—rely heavily on foreign funds and expertise. But this dependence on outside help worries many Palestinian archaeologists. Khaled Nashef, director of the Palestinian Institute of Archaeology, for example, complains that over the decades foreign archaeologists have dug in Palestine and then gone away, publishing their findings in their own languages without translating them into Arabic. "We need to work with foreign archaeologists as equal partners, but it is not easy."

One fundamental obstacle to getting Palestinian archaeology off the ground is a severe lack of opportunities for students wanting to enter the field. Nearly all of the archaeologists in Palestine who number, according to various estimates given to Science, between 15 and 25 with graduate degrees—were trained in other countries. The only institution that currently offers graduate-level training in archaeology is the Institute for Islamic Archaeology near Ramallah, which awards masters' degrees. The Palestinian Institute of Archaeology, which is part of Birzeit University and once also offered masters' degrees, suffered a major setback when its American director was murdered under mysterious circumstances in 1992.

Today, it only offers an undergraduate minor in archaeology, although Nashef who took over the rudderless institute in 1994 says he hopes to convince university administrators to restore at least a major in the subject soon.

As they wrestle with these legacies of the recent past, many Palestinian archaeologists express a strong desire to keep ideological and religious issues out of their nascent archaeological endeavors. This may prove difficult, because there is considerable evidence that the Palestinian general public -which is well aware that Israeli archaeology has often been linked with the search for Jewish roots in Palestine appears hungry for archaeological discoveries that would prove that the Palestinians were here first. Over the past few years, a number of articles have appeared in Palestinian newspapers and magazines and even on the PNA's Web site claiming that Palestinians were descended from the Canaanites or other pre-Israelite residents of Palestine. In discussions with Science, most Palestinian archaeologists were quick to distance themselves from these ideas.

"We don't want to repeat the mistakes the Israelis made," says Moain Sadek, head of the Department of Antiquities' operations in the Gaza Strip. Taha agrees: "All these controversies about historical rights, who came first and who came second, this is all rooted in ideology. It has nothing to do with archaeology." But not all archaeologists here believe that issues of Palestinian national identity can be totally shunted aside. "This question cannot be avoided," says Nashef. "Until now we Palestinians have not worked to create our own history, and this is our own fault. Archaeology here has concentrated on historical events or figures important to European or Western tradition. This may be important, but it doesn't provide a complete picture of how local people lived here in ancient times."

Until Palestinian archaeologists can develop the basic infrastructure needed to conduct excavations, these thorny ideological issues will probably remain largely academic. In the meantime, they will be concentrating on constructing their budding discipline from the ground up. "We have the core human resources," says Mahmoud Hawari, an archaeologist who teaches at the Institute for Islamic Archaeology. "Now we just need to get ourselves together. It might be a gradual evolution, but it is no shame to start small."

-MICHAEL BALTER

THE HOLY LAND RELIGION

Archaeologists and Rabbis Clash Over Human Remains

Because of the influence of religious leaders in Israel, human remains cannot be studied and excavators face continual attacks from fundamentalists

JERUSALEM AND TEL AVIV—Patricia Smith, a physical anthropologist at Hebrew University in Jerusalem, and a group of co-workers published a paper 4 years ago in the journal Gene describing a new genetic technique for determining the sex of human remains unearthed in ancient burials. The technique-which relies on a small difference between the X and Y chromosomes in the gene coding for amelogenin, a protein important in the formation of tooth enamel--looked promising for studying bone fragments or the remains of children, whose sex is very difficult to determine even from complete skeletons. Indeed, when Smith and her colleagues applied the test to fragments of DNA extracted from tooth and bone samples from Israeli archaeological sites ranging from 200 to 8000 years old, the team was able to determine unambiguously the sex of 18 out of 22 of them, including young children.

The amelogenin test could help shed light on the family relations and other genderrelated issues in ancient societies across the

world. But in Israel, the country where it was devised and which has a wealth of archaeological remains, the technique can no longer be used legally. Neither can any of the other scientific techniques anthropologists routinely bring to human remains unearthed in archaeological digs. The reason: In 1994, in the wake of protests by ultra-Orthodox Jewish leaders against disturbing ancient graves, Israel's attorney general ruled that any human remains must immediately be handed over to the ministry of religious affairs for reburial. But even this measure has not satisfied some ultra-Orthodox groups, which today continue to mount violent demonstrations against digs that might uncover human bones, even when they are unlikely to be the remains of Jews or Israelites.

"Physical anthropology is no longer carried out at Israeli excavations," says Amir Drori, directorgeneral of the Israel Antiquities Authority (IAA). And archaeologists here say the result is a great loss of important information—including data about the transition from Canaanite to Israelite settlement in Palestine. "We were beginning to understand the longevity of the Canaanite populations in this region, the extent of in-group and outgroup marriages, and the mechanisms of population



Picking a bone. Israeli archaeologists smash pots in front of the Knesset to protest religious interference at excavations.