UH archaeologists **DIANE AND ARLEN CHASE** have spent the last 40 years excavating in Caracol, Belize — fundamentally shifting our understanding of the Maya with every decade.

Maya H

JAMENPERCY/ISTOCK

History, Rewritten

Story by **LAURIE FICKMAN**

IN 1937, WOODCUTTER ROSA MAI, likely with a machete in hand, slashed his way through the thick jungle forest that covered the Vaca Plateau in Caracol, Belize. He was cutting vegetation and underbrush in search of mahogany and tree sap, known as chicle, that was used to make chewing gum.

Although history makes no note of Mai's success in the tree and gum business on the northeastern coast of Central America, it does record —with great importance — how he found carved stones and enormous mounds, cloaked in thick vegetation and years of overgrowth, that he suspected were hiding archaeological secrets.

It would take about 50 more years for young archaeologists Diane and Arlen Chase — both now faculty at the University of Houston — to begin major excavation at the site, using hand tools to carefully clear layer after layer of soil and debris.

Finally, the structures beneath the mounds began to spill their secrets. One revealed itself to be the most impressive structure at Caracol: a royal palace, ceremonial center and seat of power originally built between 600–700 AD, in the Late Classic period of the Maya civilization. Its scale and massive size — soaring 141 feet in the sky — prompted the Chases to name the structure Caana, which means "Sky Place" in the Maya language.

After dating relics and reading hieroglyphs in the palaces and temples located throughout the site, the Chases proved Caracol was a major political hub in Maya history, dominating the southern part of the Yucatán Peninsula from 560 through 680 AD before its abandonment by 900 AD. That was news to other researchers who had dismissed Caracol as a peaceful backwater town.

As remarkable as Caana's revelation was — and the subsequent rewriting of Maya history — this was only the beginning for the Chases in Caracol.

The story of these married archaeologists could fill several books. It is a story of chemistry — theirs — and science, which would lead them to become the world's leading experts on Caracol and the Maya civilization.

FIRST, THE CHEMISTRY

In 1971, Arlen Chase had been on campus at the University of Pennsylvania for one full day as a freshman when he saw Diane Zaino driving up to campus with her parents. To be sure, he saw her coming, but he could not foresee or imagine what they both had coming together for the next 50-plus years.

They would both obtain doctorates in anthropology with specialties in archaeology, marry in 1975 and have three successful children, one of whom, Adrian, now works as an archaeologist alongside them. They would prosper as professors of archaeology, and Diane would eventually become senior vice president for academic affairs and provost at the University of Houston.

Through it all, they have never missed an excavation season in Caracol since 1985, when they obtained their permit to carry out archaeology there from the Belize Institute of Archaeology, an organization

THE COUPLE WHO DIGS TOGETHER
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COURTESY OF ARLEN AND DIANE CHASE

ANCIENT HISTORY EXPOSED
Diane Chase carefully uncovers vessels and skeletal remains in front of the south wall niche of the tomb of Te K'ab Chaak.

COURTESY OF CARACOL ARCHAEOLOGICAL PROJECT

with which they collaborate frequently. Besides digging in the ground, they first explored the area on foot with machetes, then with tools such as transits and tape measures, while walking and mapping by hand, side by side, before introducing modern LiDAR (light detection and ranging) technology to the Maya region to reveal 3D maps of surfaces.

Though they have been asked many times about the practicality of working and living together, Diane always has the same answer.

"He's my best friend as well as my husband," she says. "He's my co-principal investigator; he's all of those things. We're just a really good team." In archaeological parlance, they still dig each other.

NEXT, THE SCIENCE

In 2025, the Chases and their archaeological team would find one of the most spectacular things they had ever encountered: the 1,700-year-old burial tomb of Te K'ab Chaak, the first ruler of Caracol and the founder of its royal dynasty.

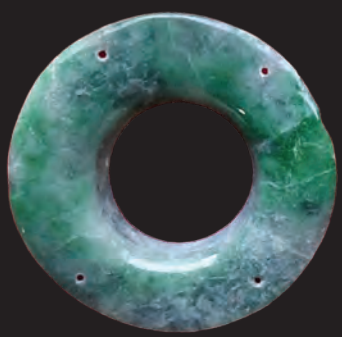
The discovery is the first identifiable ruler's tomb found in more than four decades of work in Caracol, the largest Maya archaeological site in Belize and in the Maya lowlands.

Te K'ab Chaak, who acceded to the throne in 331 AD, was interred at the base of a royal family shrine along with 11 pottery vessels, carved bone tubes, jadeite jewelry, a mosaic jadeite mask, Pacific spondylus shells and other perishable materials.

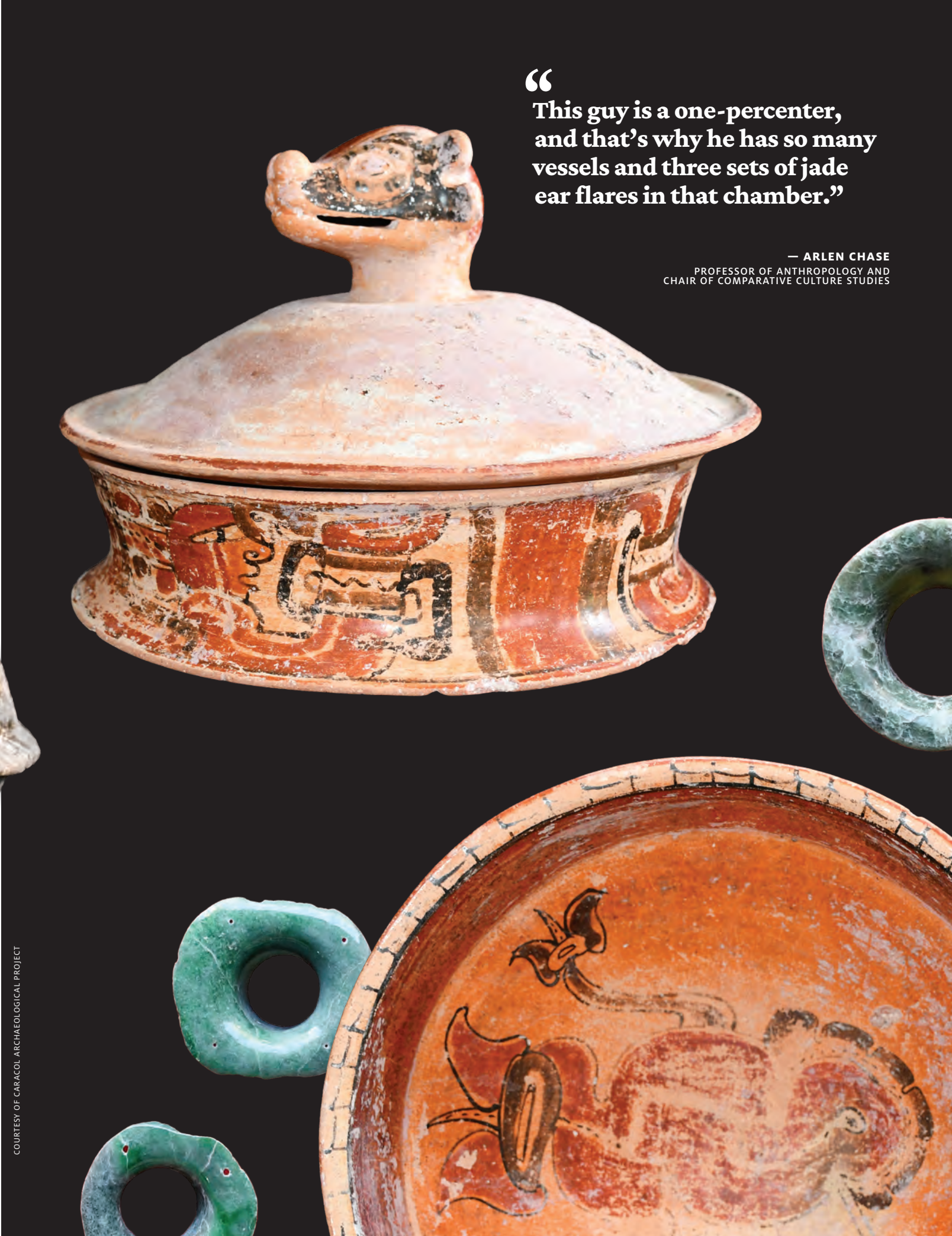
"It is one of our most important finds," Diane says. "We found the first person in the dynasty, so that, in terms of the history of Caracol, is huge, and it's incredible that we could identify him as a ruler. We've found numerous tombs with really impressive artifacts inside that were clearly [those of] members of the royal family, but this is the first one that matches with hieroglyphic records to be a ruler, and beyond that, the first dynastic ruler."

"I was just amazed when I saw it," says Arlen, who is a professor of anthropology and chair of Comparative Culture Studies at UH. It was Arlen who first peered into the tomb and saw the red cinnabar on the walls, the large cross-shape niche carved into the

DIGGING UP CLUES
Arlen Chase, a leading expert in contextual pottery analysis, during the early days of his archaeology career.



COURTESY OF ARLEN AND DIANE CHASE



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— ARLEN CHASE
PROFESSOR OF ANTHROPOLOGY AND CHAIR OF COMPARATIVE CULTURE STUDIES

COURTESY OF CARACOL ARCHAEOLOGICAL PROJECT

DECADES OF DEDICATION
Diane and Arlen Chase have devoted most of their adult lives to meticulously excavating, identifying and cataloguing artifacts from Caracol.

back wall, and the elaborate vessels and jewelry that were buried with the ruler.

Those vessels tell a story about Te K'ab Chaak that does not paint the rosiest picture of his leadership.

"This guy is a one-percenter, and that's why he has so many vessels and three sets of jade ear flares in that chamber," Arlen says. "The Early Classic period is the time when the rulers assert the fact that they oversee everything, completely distant from the rest of the population. That changes at the end of the Early Classic period, especially in Caracol, when they start to share the wealth with the general population. But not this person."

The tomb also gives the Chases evidence of how to rewrite the relationship between Caracol and its Central American neighbor Teotihuacán, a city previously thought to have dominated the Maya region beginning in 378 AD.

But this tomb is dated to 350 AD, 28 years before that development.

"Everyone thought Teotihuacán was so important because there was nothing else like it at that time in Mesoamerica, so the assumption had been that Teotihuacán dominated everything, including the Maya," Arlen says. "This discovery says they didn't dominate everything. They were simply another political player of that time."

In fact, it was the Maya at Caracol who defeated the powerful city of Tikal, located in what is now Guatemala, in warfare in 562 AD — events recorded on a Caracol carved stone altar found by the Chases in 1986. This event points to Caracol's importance in the Late Classic period, debunking the prevailing myth of Tikal's invincibility and dominance.

The Chases' archaeological finds indicate that the ancient Maya were travelers who were interconnected with other parts of Mesoamerica. People moved back and forth between Caracol and Teotihuacán.

ANTHONY GOLLAB / UNIVERSITY OF HOUSTON

FACING THE PAST
The mask of Maya ruler Te K'ab Chaak — the reconstruction of which is still in progress — is a crucial part of a trove of artifacts that reveal new knowledge about an ancient civilization.

Today a trip by car between these two sites would take more than 23 hours. The one-way walking time is approximately 153 days, yet plenty of evidence exists linking the two locations.

IT TAKES TIME TO UNCOVER TIME

For more than 40 years, the Chases have been the lead scientific researchers at the Caracol site, but they note that they could not have made these discoveries without extensive support from a variety of sources.

The Belize Institute of Archaeology provides site permits and collaborates on the long-term research focus. The Government of Belize has secured funds to consolidate the ancient structures and, most recently, to construct a paved road to the site to allow tourists and local Belizean visitors greater access. The various institutions at which the Chases have worked, such as UH, have been understanding about their need to work remotely from the jungle. Numerous institutions and individuals have provided financial support for the investigations, among them the Alphawood Foundation of Chicago. Their children tolerated annual treks to the jungle, and project members, staff, and students from the United States and Belize make the day-to-day discoveries possible.

As the Chases often note, there is no "I" in archaeology. It takes a team, time and patience.

"One of the reasons we're able to make as many contributions as we have is that we stayed put at one site for a long period of time, and we just kept asking questions," Diane says. "We asked, can we see the impact of warfare? So we developed an archaeological research design to see the archaeological impact of successful warfare. We asked, were there different diets among people at the site? There were. We just continued to ask new research questions over all of those years. The results help build the picture."

"If we'd worked at Caracol for five or 10 years, we would have had part of the story and only part. If we'd stopped at 20, it still would have only been part. I think the point is that there are many more years of exploration and many more years of discovery," she says.

Unlike the ruler whose tomb they uncovered, long may they reign.

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> ARCHAEOLOGIST AND UNIVERSITY OF HOUSTON PROVOST