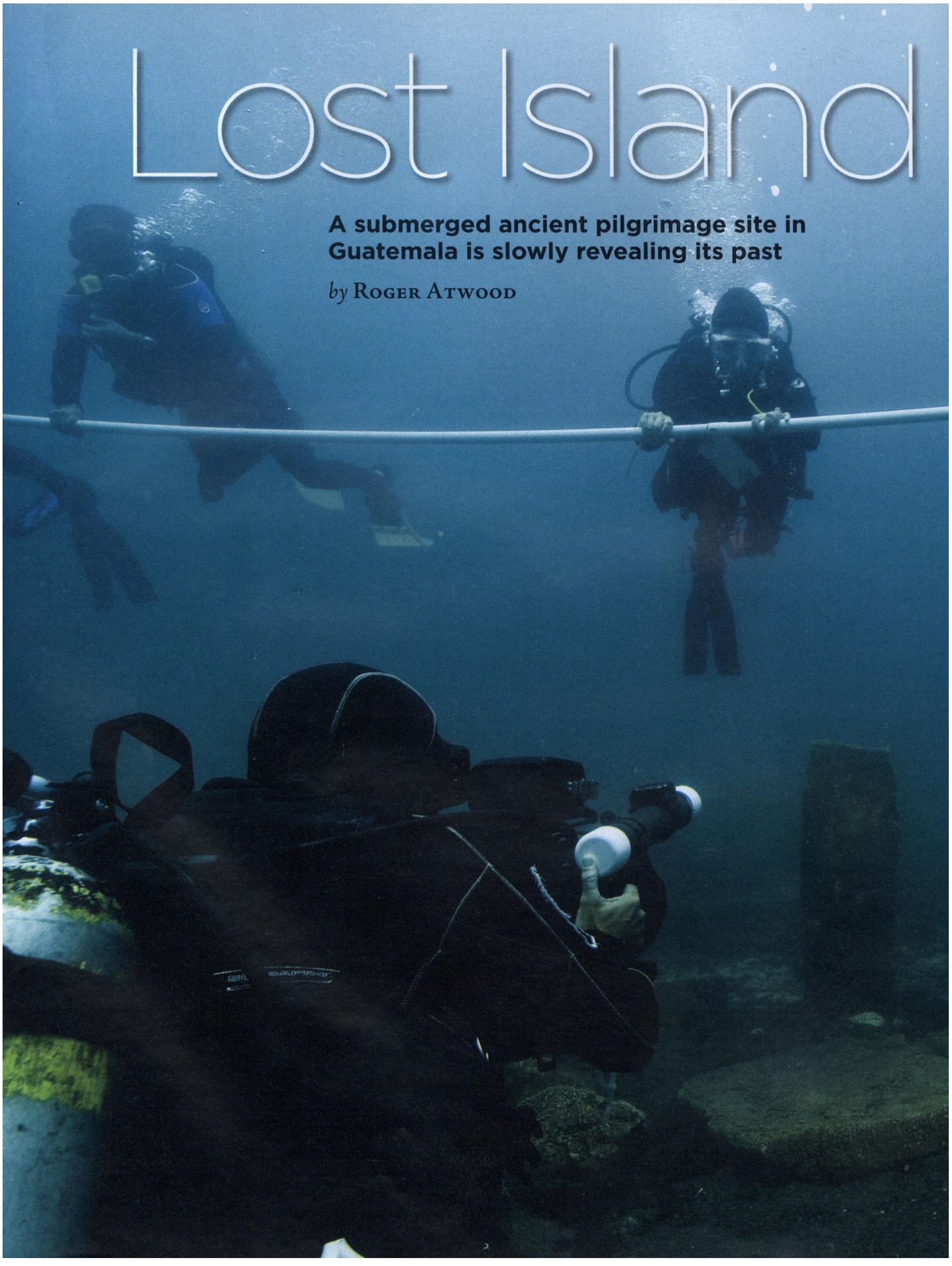
Lost Island

A submerged ancient pilgrimage site in Guatemala is slowly revealing its past

by Roger Atwood

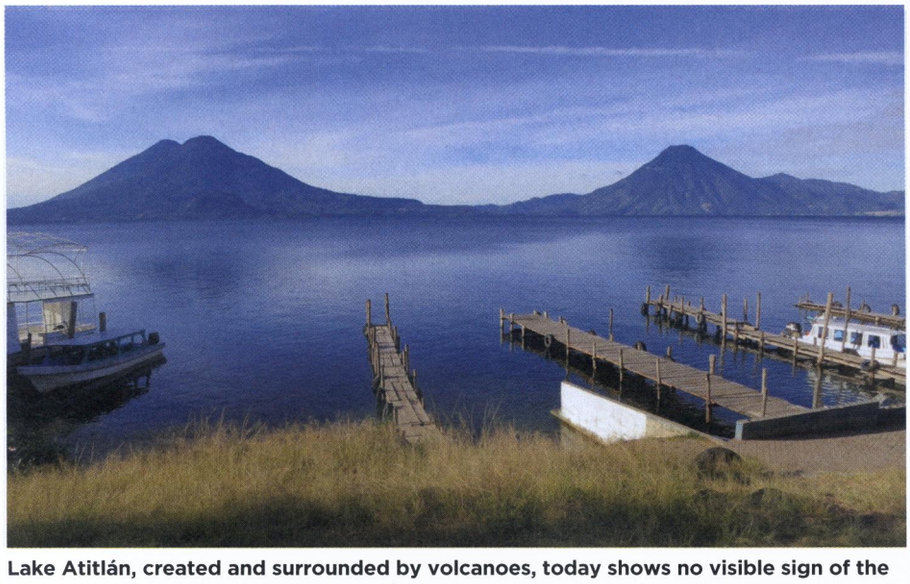


of the Maya

Archaeologists explore the inundated remains of a Maya pilgrimage site that now sits beneath the waters of Lake Atitlán. A stone stela remains in place more than 1,500 years after the site was flooded.

THE ROAD TO GUATEMALA'S Lake Atitlán climbs past cornfields and ramshackle villages before turning a corner and bringing the lake into full view. Lying in the bowl of a long-collapsed volcano, Lake Atitlán looks weightless and ethereal, as if somehow floating between the peaks and cliffs that surround it. To the ancient Maya who lived in this region, such mountain lakes carried intense ritual power. In *Popol Vuh*, an epic poem based on ancient legends passed down over centuries and relayed by Maya elders to sixteenth-century Spanish scribes, the world itself was born when the two creator gods, Tepeu and Q'uq'umatz, ordered the water that covers the earth to part. "May the empty space be filled! May this water withdraw and lift, and the land rise up and affirm itself, so that it may be cultivated," they command in the poem's opening chapter.

Thousands of years ago, there was an island in the middle of Lake Atitlán, a word that means "place of water" in the indigenous language Nahuatl. For hundreds of years, beginning in about the fifth century B.C., pilgrims traveled across Guatemala's fertile highlands to this mirror-like expanse of water. They then embarked in canoes and paddled out to the island, which mimicked the very place of creation described in *Popol Vuh*. "A peak surrounded by water which, in turn, was surrounded by mountains—there could be no more sacred or powerful a spot," says James Brady, an archaeologist and specialist in Maya ritual at California State University, Los Angeles. "This would represent the very center of the cosmos, where all the great acts of creation had occurred." Lakes such as Lake Yojoa in Honduras and Lake Catemaco in southern Mexico, as well as caves and other remote locales, carried deep cosmological associations for ancient Mesoamericans, Brady says. But this island went beyond those places—in Maya eyes, it was sublime. "An island in the middle of Lake Atitlán perfectly modeled the Maya ideal of the primordial landscape."

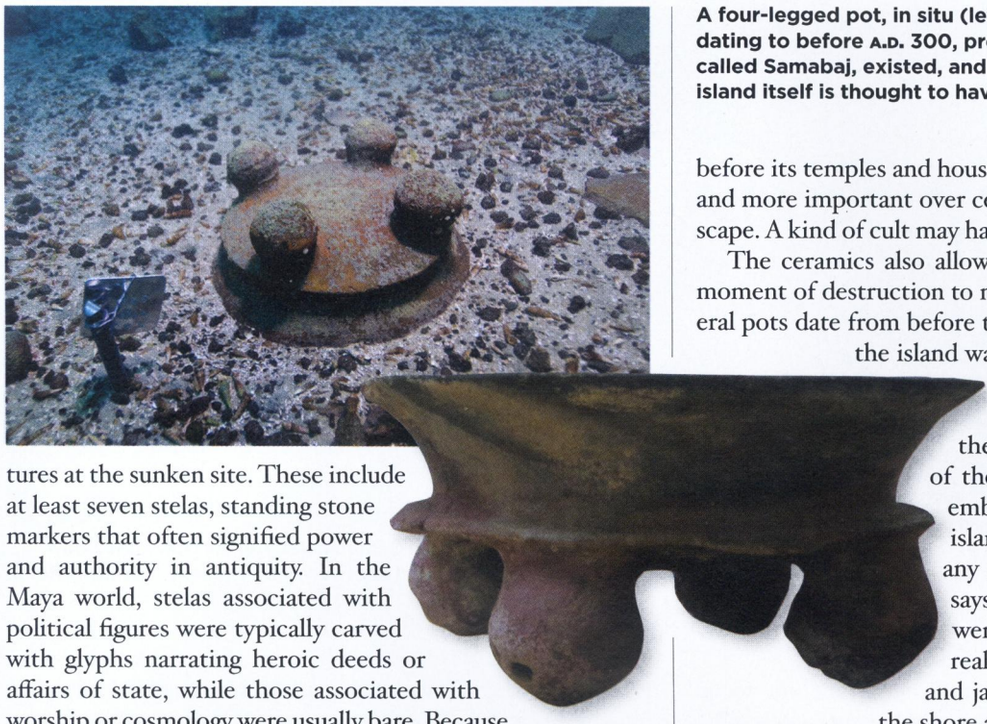


Lake Atitlán, created and surrounded by volcanoes, today shows no visible sign of the island pilgrimage site that was once there.

At some point around A.D. 250 or 300, the sacred island—where priests tended to a crowded array of shrines and monuments, and holy men studied smoke trails for divine messages—vanished. Scholars believe that the Atitlán Volcano, which still rises about five miles south of the lake's southern shore, erupted at that time and sent lava, mud, and debris down the mountain. The flow reached and blocked the lake's outlet, a stream that once ran near the modern-day village of San Lucas Tolimán and fed into the Madre Vieja River, which flowed into the Pacific Ocean. Lake Atitlán's sole drainage channel had been permanently dammed. Still fed by inflowing streams and rainfall, the level of the lake began to rise. Over a period of weeks, months, or perhaps even a year or two, the waters swallowed the island. With waves lapping at temple walls and washing over its stone-paved public square, the priests packed up their belongings and left. By the time the waters stopped rising, the 30-acre island was covered by at least 60 feet of water. The lake's level has continued to fluctuate over the centuries, but it is not believed to have ever receded enough to reveal the island again. There are no recorded sightings or any signs of subsequent settlement, and the island appears to have been forgotten.

IN 1998, A SCUBA DIVER named Roberto Samayoa spotted a submerged site at the bottom of Lake Atitlán and contacted archaeologists. At first they were skeptical, believing he had found modern stonework that had somehow fallen into the lake. Although other divers had come across the site as early as the 1970s, and one had even described it in a diving publication, no one had grasped its significance. It wasn't until 2007, when Samayoa showed his own pictures of sunken staircases and plazas to Sonia Medrano, an archaeologist at the University of San Carlos in Guatemala, that it became clear that a major discovery had been made—the sunken island was an untouched Maya pilgrimage site, an underwater time capsule unmolested by looters and untouched by urbanization. "There was no contact with the site from the day it disappeared under the waves until our time," says Medrano, "and there is no other known place like it in the Maya world."

Medrano had never scuba dived before, but she learned how for the purpose of exploring the site, which Samayoa had named Samabaj, a combination of his own surname and *abaj*, the word for rock in the Mayan language K'iche'. (Its name in antiquity is unknown.) Through months of laborious surveys in murky water, Medrano began mapping and photographing the site. After on-and-off work over the next five years, accompanied by Samayoa acting as a kind of guide and diving instructor, and with a shifting cast of students and visiting colleagues, Medrano has documented no fewer than 16 religious struc-



A four-legged pot, in situ (left), and after cleaning (below), dating to before A.D. 300, provides evidence that the site, now called Samabaj, existed, and also for the date at which the island itself is thought to have vanished.

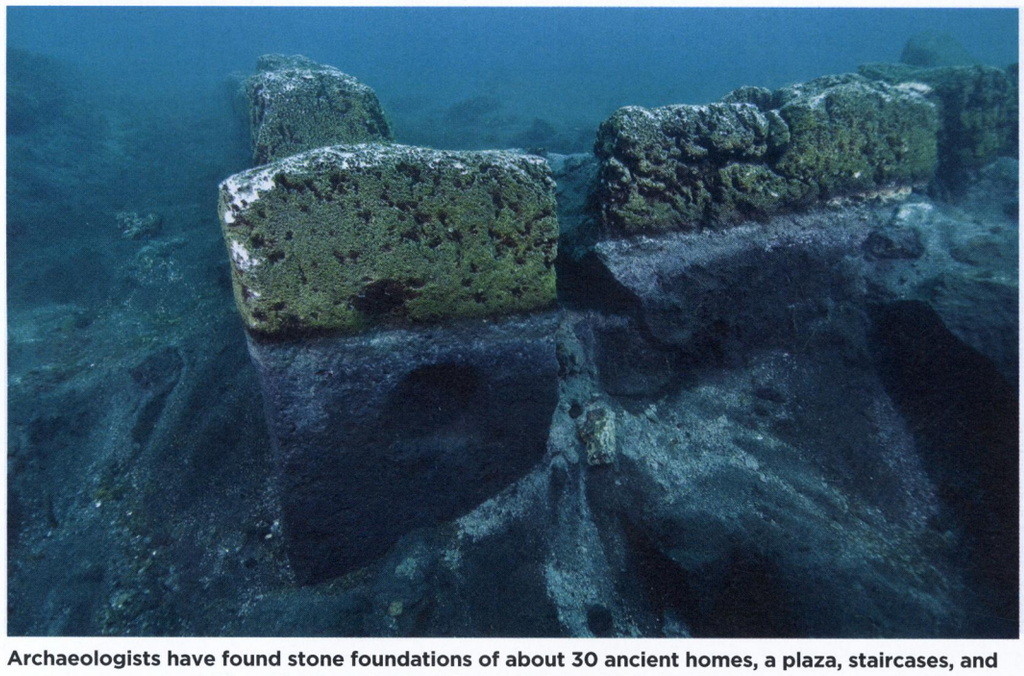
tures at the sunken site. These include at least seven stelas, standing stone markers that often signified power and authority in antiquity. In the Maya world, stelas associated with political figures were typically carved with glyphs narrating heroic deeds or affairs of state, while those associated with worship or cosmology were usually bare. Because all the stelas discovered thus far at Samabaj are uncarved, Medrano concluded early on that the site was a religious one, not a political power center or simply a large fishing outpost.

How she arrived at this interpretation says a great deal about the process of archaeological deduction. "When you're approaching a previously unknown site such as this, you have to clear your mind and look at it with fresh eyes," Medrano says. "Wouldn't it be more logical that an island in the lake would be just a fishing or crabbing outpost, as many islands are today? But the stelas and the religious structures demonstrate that this was a place of public rituals and pilgrimage."

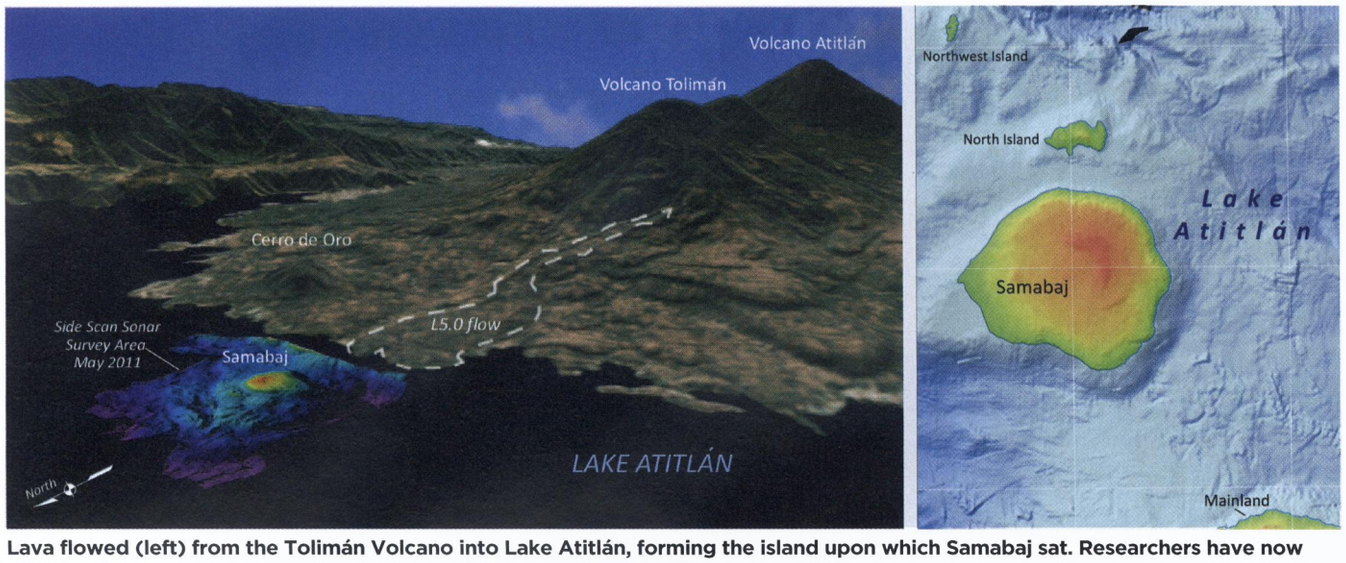
Archaeologists have not dived Samabaj for three years now, because of hostility toward the team from politicians on the lake's south bank. But while they were still able to do so, Medrano and her colleagues retrieved 28 complete or nearly complete ceramic vessels and fragments from many others. Although some of the recovered pots date back to as early as 1200 B.C., the structures all date from about 400 B.C. and later, suggesting, explains Medrano, that the site was popular long before its temples and houses were erected. "It became more and more important over centuries as part of the ritual landscape. A kind of cult may have developed around it," she says.

The ceramics also allowed Medrano to date the island's moment of destruction to no later than A.D. 300. While several pots date from before that year, none date to after it. As the island was flooded, its few residents seem to have taken the best ceramic vessels with them and left behind the more simple crockery. Most of the ceramics Medrano found were embedded in the soil at the sunken island's former shore level, far from any structure. This might mean, she says, that the island's fleeing residents were loading wares onto boats, but, realizing the more ordinary bowls and jars couldn't fit, dumped them on the shore and left.

On the basis of this evidence, Medrano concluded the island likely disappeared at the end of a period known as the Late Preclassic, when a few cities in the Guatemalan highlands dominated trade and worship in the Maya world. These included Takalik Abaj ("Tomb of the Vulture Lord," September/October 2103), El Naranjo, and Kaminaljuyú, near present-day Guatemala City, the biggest city and the last major urban Maya center in the southern mountains. Around the time Samabaj disappeared, those cities witnessed violent upheaval, declining



Archaeologists have found stone foundations of about 30 ancient homes, a plaza, staircases, and even saunas, among the submerged ruins of Samabaj, attesting to its importance as a ritual site.



Lava flowed (left) from the Tolimán Volcano into Lake Atitlán, forming the island upon which Samabaj sat. Researchers have now confirmed the existence not only of this island, but also two smaller islands (right) that were also covered by the lake's rising waters.

populations, and a near-halt to the art of stone carving that the Maya used to mark history and the passage of time.

As the Preclassic period faded into the Classic, the focus of Maya political power shifted to the humid Petén lowlands, where cities such as Tikal and El Mirador were already well established, and would soon reach new heights of wealth and cultural splendor. The reason for this shift—from temperate highlands to tropical lowlands—has never been completely settled. Archaeologists have attributed it to the massive eruption of the Ilopango Volcano in El Salvador, although recent research suggests that that eruption happened too late to be the cause of the shift, though it may have accelerated it. Other scholars point to drought in the highlands. Whatever the cause, the remote pilgrimage site in Lake Atitlán vanished while nearby cities faced war and chaos. "An old order was dying and a new one was beginning, and the disappearance of Samabaj came within that context," Medrano says.

Working at Samabaj can be trying. Apart from occasional algae blooms, the lake's water is reasonably clear, but, at 60 to 120 feet beneath the surface, depending on water levels and the part of the sunken island being studied, there is very little light. Medrano had to work with spotlights to make the first, crude sketches and pinpoint artifact findspots. A team from the Scripps Institution of Oceanography came in 2007 and surveyed parts of the site, but its full dimensions still remained a mystery. In 2010, John Hale of the University of Louisville, an archaeologist who has explored oracular sites such as Delphi and worked on ancient Greek shipwrecks, came to Samabaj to try to map the entire site by hand. He didn't get very far. "It was too murky," he now says.

But Hale came back the next year with sophisticated sonar equipment and a boatload of technicians and divers to work closely with Medrano to map the site. Using side-scan sonar, which emits lateral sound waves (like bats searching for food) from a sensor dragged under the water, and swath bathymetry, which gauges depth with a fan-shaped blast of sonar waves from the surface, Hale and his team carried out what he believes to be the first complete 3-D survey of any Maya site. The project was also the first time side-scan sonar and swath bathymetry had been used simultaneously to map an underwater archaeological site, creating a much more detailed picture than had previously been possible.

Using data collected during hundreds of dives, each able to last no more than 45 minutes, and with the results of the underwater survey, Medrano and Hale have slowly gained an idea of how the island operated in antiquity. Their work has painted an intriguing picture of a sacred site built in harmony with its natural surroundings. Medrano identified three, and possibly four, stone jetties along the island's former shore, unmistakable evidence of pilgrim-bearing boats regularly arriving and departing. The largest pier jutted 90 feet into the lake and had a well-worn sandy path running toward it that is still visible. After disembarking at the island, pilgrims would have ascended a steep hillside and passed through a natural gap between two long, linear ridges of hardened lava. Then they would have walked through a gate—part of its stonework still visible—and entered a main square, more than 50 yards wide, which had been built to take advantage of a natural terrace between two roughly parallel ridges near the island's summit. With a stela standing at one end, and a stone altar next to the stela, the plaza marked the center of what Hale calls "the island's sacred acropolis." Hundreds of people could have fit in the plaza to watch dances, sacrifices, and other Maya ceremonies, with hundreds more on the grandstands formed by the overlooking ridges. A second, smaller entrance on the square's opposite end may have been where performers made their entrances, explains Hale.

On the flatter terrain of the island's southwest side, Medrano found about 30 residential buildings—discernible today only by their stone foundations—which probably housed a

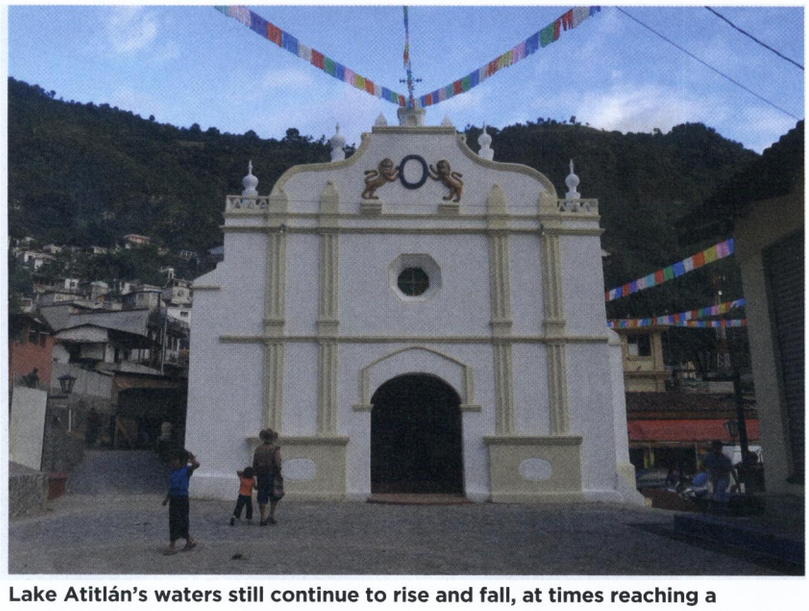
permanent staff of island caretakers, their families, and priests who controlled access to the site. The rest of the island seems not to have been built upon, and was probably used for growing food to feed both residents and religious tourists, likely supplemented by food grown on the mainland. "I think a picture emerges of a place where pilgrims would arrive carrying very little, worship at shrines that were attended by the resident priests, and eat. Perhaps some would stay the night, but most would head back the same day," says Medrano. Two saunas or sweat lodges, similar to those found at other Maya sites, where the holy would purify themselves before worship, stood between the residences and the shrines. Medrano also discovered a human tooth with burn marks on it, attesting perhaps to the fires priests used to make oracular smoke columns. Common at Maya religious sites, such blazes would have been clearly visible to people on the mainland shore and would have turned the lake into a vast ritual auditorium.

HALE'S WORK HAS ALSO confirmed Samayoa's belief that there was a second island, just north of the main one. This much smaller island was divided from the main island by a deep channel, and once had a stone structure that may have been a jetty. In addition, Hale discovered a third island, a rocky outcrop that did not appear to have any structures on it. The fact that there were three islands would have reinforced the ancient Maya view that Samabaj was a kind of microcosm of creation itself. Three islands echoed the three attempts at the creation of humans as narrated in *Popol Vuh*—the first from mud, the second from wood, and the third, ultimately successful attempt, from corn. They also symbolized the three sacred hearthstones of ancient Maya cosmology, which were placed together by three deities at the moment of the start of the earth's current cycle of creation. And they would represent the three stars in Orion's belt, whose rising in the sky was tied to seasonal growing cycles. Also, the main island's roughly circular shape would have brought to mind the turtle that represented the world afloat on a tranquil sea in Maya mythology.

All this symbolic freight surely heightened the psychological impact of the drowning of Samabaj, says Medrano. Although she cautions that the three islands were too disparate in size to perfectly resemble the Maya creation myth, a sense of powerlessness, despair, and dread must have spread far and wide as the waters crept over its temples and stelas. "A great religious site is lost before your eyes. Think of the shock and sadness that would provoke, even today. We can only guess at how they experienced it, but it must have been very tough to watch," she says.

Did the ancient Maya know why the island was disappearing? It's a speculative question, but indigenous people today are closely attuned to the lake's volcanic rumbles, tremors, and water fluctuations, and Medrano has no doubt the region's ancient inhabitants were as well. "They knew what was happening, for sure. They knew the lake's outlet had been blocked by lava and that they had to leave," she says. In A.D. 300, this may have sparked traumatic political changes, says Cal State's Brady. "Even if Samabaj were uninhabited, it was too important a site not to be controlled by some power around the lake," he explains. "Control of the site would have been a clear sign of legitimacy, and the covering of the site by the lake would be seen as loss of that legitimacy." As the lake rose, shore settlements would have been forced to shift to higher ground, compounding the distress, he points out.

EVEN TODAY, THE SUDDEN swelling of Lake Atitlán and the wild swings in its level can be unnerving for local residents as they watch the water creep over town squares and kitchen floors. Since the lake still has no outlet, it can rise as much as 15 feet in a matter of weeks, as it did in 2011, and then just as suddenly retreat. Local people hold title to land that is now underwater. They tell stories about how the lake once reached as high as a nearby church's walls, and then drained away again like a bathtub. "The lake is the master of its own destiny," says Samayoa. "It rises and falls, rises and falls."



Lake Atitlán's waters still continue to rise and fall, at times reaching a church in the village of Santa Catarina Palapó, located more than 100 feet from the lake's shore.

Local people today have a complex web of superstitions and legends about the lake. They seldom bathe in it, for fear of being drowned by malevolent spirits, says Medrano. She believes those associations could well date back to the loss of a major pilgrimage site some 1,700 years ago and the emotions it caused. "People today are still frightened by Lake Atitlán," she says. "It looks so peaceful, so serene, but this was the place of a catastrophe that their ancestors experienced." ■

Roger Atwood *is a contributing editor at* ARCHAEOLOGY.