

# The tri-lobed disc of Sabu

By **LEONARDO VINTIŪI**  
Epoch Times Staff

*Oopart (Out Of Place ARTifact) is a term applied to dozens of prehistoric objects found in various places around the world that, given their level of technology, are completely at odds with their determined age based on physical, chemical, and/or geological evidence. Ooparts often are frustrating to conventional scientists and a delight to adventurous investigators and individuals interested in alternative scientific theories.*

In 1936, a tri-lobed disc was discovered by Egyptologist Walter Brian Emery during an excavation of the Mastaba of Sabu (Tomb 3111, c. 3100–3000 B.C.) in Saqqara. Sabu was the son of the Pharaoh Anedjib (the fifth ruler of ancient Egypt's first dynasty).

This enigmatic disc was found among pottery, bones, and several other stone implements—objects that Sabu, a first-dynasty noble, wished to take with him into the afterlife.

The device measures about 23.5 inches in diameter and a little over 4 inches in height. Although originally believed to be carved from slate, the disc is actually made of metasiltstone—a material often employed by Egyptian carvers for its ability to withstand thin, detailed work without fracturing. Other vessels found in this tomb are also carved from this hard rock.

Like a wide flat bowl with three thin, raised lobes, the shape of the object immediately suggests a propeller with three blades and a center hole to be placed on an alleged axis. Even for metasiltstone, the details of the disc (especially the three lobes and center cylinder) are incredibly thin. While the disc does not observe perfect symmetry, all its lobes are approximately of equal size and are



**CURIOS CARVING:** A carved stone disc found in an Egyptian tomb still baffles researchers. JON BODSWORTH/THE EGYPT ARCHIVE

oriented at 120 degrees from the center. But as to the real function of the object, researchers are still not sure.

While they may not be able to determine what it was, many agree that the artifact could not have been a wheel, as the wheel only made its appearance in recent Egypt, 1500 B.C., during the 18th Dynasty, with the invasion of the Hyksos. However, some engravings, from where it appears wheels are drawn, go back to the fifth dynasty, about a millennium before that period. The Sabu disc, however, is an even greater challenge to Egyptologists because it dates knowledge of the wheel around 3000 B.C. during the time of the first dynasty.

Another even more incredible scenario suggests that the stone disc actually served as a kind of propeller used with hydraulic fins, which would imply that the Egyptians probably already had the tech-

nology to build electric motors. While stone might not be a reasonable material for such a device, renowned Egyptologist Cyril Aldred posits the disc is simply a reproduction of a metallic object much older than this one.

Of course, this object is also believed to have served a significantly less incredible purpose. Some believe the disc could simply be the foot of an oil lamp. However, critics of this theory argue that its function as a tri-wicked, ritual lamp is rather unlikely due to the shape and curvature of its lobes, which seem to suggest function rather than mere ornamentation.

So why such an elaborate shape? While it may not have been a propeller of a vehicle, the strange disc may have still been part of some kind of ancient machine—a component for processing grains or fruit, perhaps. Some have even suggested that it

may have been part of a generator or battery to produce electricity.

The skill required to carve such an object is also important. If someone were to make such an object today, the technology needed to form such thin, proportional shapes from solid rock would require something like a modern computerized 3D milling machine.

So does this artifact point to a significant remnant (or reproduction) of an ancient technology, or is it merely a decorative specimen showcasing the talent of a skilled stone carver?

Either way, the tri-lobed disc now rests on the first floor of the Cairo Museum where all can appreciate the artifact and wonder to themselves what kind of technology the Egyptians were actually able to create during the early days of their glorious empire.

# Two big black holes found together

**WASHINGTON (Reuters)**—Two colossal black holes appear to be orbiting one another in sort of a cosmic minuet at the center of a faraway galaxy formed when two separate galaxies collided, U.S. astronomers said.

These two so-called supermassive black holes, which are celestial objects with enormous gravitational pull, are locked in orbit about 5 billion light years away from Earth, the scientists said. A light year is about 6 trillion miles, or the distance light travels in a year.

Data from Apache Point Observatory in New Mexico pro-

**'This could be a case where a big galaxy ate a smaller galaxy.'**

—Todd Boroson, National Optical Astronomy Observatory

vided the best evidence to date of two black holes orbiting each other, according to astronomer Todd Boroson of the National Optical Astronomy Observatory in Tuc-

son, Arizona.

This is known as a binary system.

Scientists believe all or most galaxies have supermassive black holes at their centers. For example, our Milky Way galaxy has a black hole at its center that is about 3 million times the mass of the sun.

When galaxies collide and merge, as they do relatively often, the black holes at their centers may gravitate toward one another because of their great mass, entering into orbit as these two appear to be doing.

Boroson said orbiting black

holes eventually may merge into an even larger single black hole.

While scientists think binary black holes may be relatively common, they have been elusive.

Boroson and fellow National Optical Astronomy Observatory astronomer Tod Lauer detected these two by spotting the radiation emitted by objects apparently being sucked into the black holes by their gravitational pull.

"You don't see the black holes. You only see the effects of the black holes," Boroson said in a telephone interview.

The smaller of the black holes is about 20 million times the mass of our sun, while the larger one is a billion times the sun's mass, the scientists wrote in the journal Nature.

"We've discovered that there's a pretty good correlation between the size of a black hole and the size of the galaxy that it's in. This could be a case where a big galaxy ate a smaller galaxy," Boroson said.

These two black holes take about a hundred years to orbit each other and are located about three-tenths of a light year from each other, Boroson said.

# Fossil of 10-million-year-old bird found in Peru

**LIMA (Reuters)**—Paleontologists working in Peru have found a fossil from a bird that lived 10 million years ago, scientists said after returning from the dig site on the country's desert coast.

**'This was an animal that perhaps trapped its prey and chewed while it flew.'**

—Mario Urbina, Peru's Natural History Museum

The species of bird had a wing span of 19.7 feet and fed mostly on fish from the Pacific Ocean. It first appeared 50 million years ago and was extinct about 2.5 million years ago because of climate change, paleontologist Mario Urbina of Peru's Natural History Museum said.

Scientists discovered a rare fossil of the bird's head in Ocucaje, in the Ica region of Peru's southern coast, where an arid climate has preserved

many fossils.

"The cranium of the bird, from the Pelagornithidae family, is the most complete find of its kind in the world. Its fossil remains are hard to find," Urbina said.

Old ocean seabeds in the area have been a treasure trove for fossil hunters.

"This site had marine sediments. The fossil was found with other remains from whales, sharks, and turtles," Urbina said.

At the time of the bird's death, Peru's coast was hot and rainy, but millions of years later, it turned cool and dry, he said.

The fossil is 15.7 inches long and is currently on display at the museum.

The bird had some peculiar characteristics, including teeth at the tip of its beak and large wings that were less efficient than those of contemporary birds.

"The teeth helped capture its prey. This was an animal that perhaps trapped its prey and chewed while it flew. It had a hard time taking off from the ground, and needed an elevated point to take off from," Urbina said.

# Japan considers putting robot, astronaut on Moon

**TOKYO (Reuters)** - Japan is considering putting a robot on the moon by 2020 and an astronaut by 2030, a report from a government office showed on Friday, amid fears that the country will be left behind in Asia's space race.

The plans follow China's first space walk and India's launch of their first unmanned moon mission last year. Beijing officials have said that China is looking to eventually put astronauts on the moon, though the government has not revealed any schedule.

The robot and the astronaut would probe the moon to see how its resources could be used, the report showed.

A space development panel also

discussed on Friday the possibility of Japan eventually starting its own manned space program, a government official said.

"Some experts are concerned that unless there is an independent program, then Japan may be left behind in terms of space development," said an official from the Strategic Headquarters for Space Policy (SHSP), under the Cabinet Office.

"If large scale space development projects, such as moon probes or space solar power system, are conducted, not only robots but also people will have to be there. The technology of manned space programs will certainly become the foundation in such cases," he said.

Japan's space program was in tatters in the late 1990s and early 2000s after unsuccessful rocket launches, but it successfully launched its first lunar explorer in 2007. It has sent six astronauts to space, all through international missions.

The Soviet Union, United States and China are the only countries that have put people in space with their own rockets.

Amid worries about a regional space race and North Korea's nuclear and missile capabilities, Japan introduced a new space law last year that allows military use of space, ending a decades-old pacifist policy.

The law, which allows the military to launch its own satellites for

spying and warn of missile launches but rules out offensive weapons in space, opened ways for the nation's space industry to compete globally.

SHSP is set to announce in May its first comprehensive space strategy that will include ideas for military and diplomatic use of space, the official said.

While SHSP was founded last year to oversee the comprehensive space strategy, Japan's space program has been led for years by Japan Aerospace Exploration Agency (JAXA).

JAXA runs on an annual budget of 228 billion yen (\$2.3 billion), just a fraction of NASA's \$17 billion annual spending.

# Archaeologists find statues of ancient Egyptian king

**CAIRO (Reuters)**—A team of Egyptian and European archaeologists have discovered two statues of King Amenhotep III, who ruled Egypt roughly 3,400 years ago, the Supreme Council for Antiquities said.

Chief Egyptian archaeologist Zahi Hawas said in a statement that the first statue was made of black granite, while the second depicts the king

in the shape of a Sphinx, a figure with the head of a man and the body of a lion.

Amenhotep III presided over an era that saw a renaissance in Egyptian art. He was succeeded by his son Akhenaten, the sun-worshipping pharaoh credited by some for starting the world's first known monotheistic religion.