

The **Brindisi** Bronzes

CLASSICAL CASTOFFS RECLAIMED FROM THE SEA

Corrosion from centuries in salt water (below) has peeled "skin" from a bronze head with copper lips (right). The beard and pensive face suggest that the image could be an ancient Greek philosopher.



PROVINCIAL ARCHAEOLOGICAL MUSEUM, **BRINDISI**

HOW COULD FRAGMENTS OF STATUES FOUND TOGETHER OFF ITALY'S COAST VARY SO GREATLY IN AGE? THEY MAY BE THE FIRST EVIDENCE OF BRONZE BEING SHIPPED FOR RECYCLING IN ANCIENT TIMES.

Text and photographs by O. LOUIS MAZZATENTA





Near day's end on July 19, 1992, Major Luigi Robusto, *carabinieri* commander for the province of **Brindisi**, cautiously descended 50 feet into the Adriatic Sea, twice as deep as he had dived before. While admiring the beauty of a starfish, he saw greenish toes protruding from the sandy floor.

"Not here too!" he thought, for in the line of duty Robusto has seen many corpses. "I brushed the first three toes with my hand. They were rough and hard. I knew the foot was not human."

The site was secured against theft, and a fisherman casting his net nearby was firmly discouraged, though he would not have been the first to haul up statuary. A first-century B.C. votive relief (top) found at the Roman port of Ostia shows fishermen lifting a Greek sculpture of Hercules in their nets—a scene scholars believe depicts an actual event.

Claudio Mocchegiani

Carpano, the director of Italy's Technical Service for Underwater Archaeology, coordinated the excavation, conducted by a private marine cooperative. A team of archaeologists and technicians uncovered an array of bronze heads, arms, feet, and fingers (painting, facing page).

The discoveries captured the



attention of all Italy. Archaeologists were taken by the number of objects and the diversity of their ages, ranging from fourth century B.C. to third century A.D. But where had they come from, and where were they going?

"We like to think the bronzes were being carried into Brindisi," says Giuseppe Andreassi, archaeological superintendent

of Apulia, who believes that the boat was caught in a storm sometime between the third and sixth centuries A.D. Its bronze cargo may have come from eastern provinces, where Romans collected worn statues from public areas for reuse.

"This discovery is the first tangible proof of commerce in the recycling of ancient bronzes," asserts Francesco Nicosia, archaeological superintendent of Tuscany.

The manufacture of bronze mirrors in **Brindisi** and the reuse of scrap copper are mentioned in the first-century A.D. writings of Pliny the Elder, a Roman historian. So it may be that the cargo's destination was

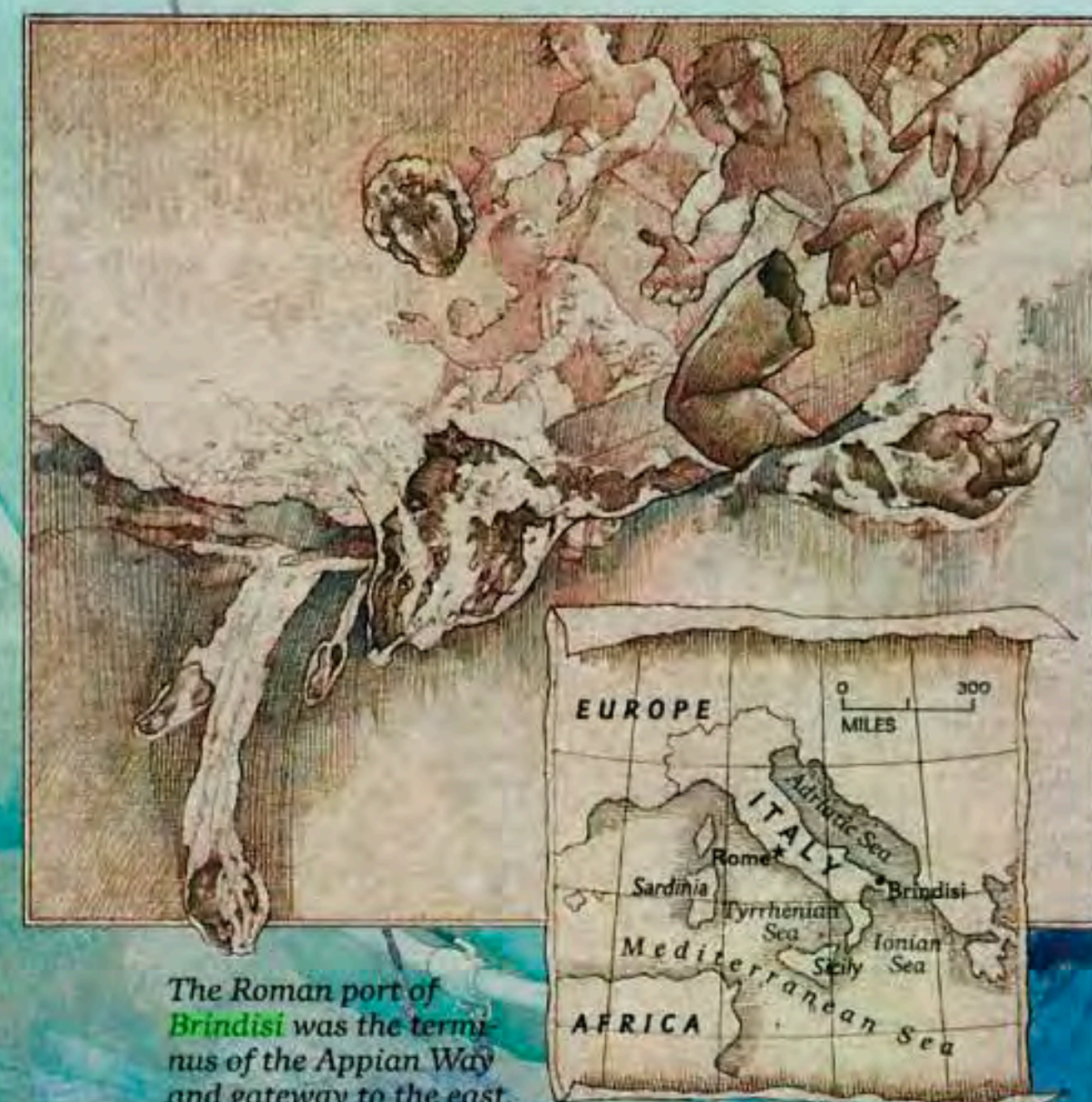
a foundry where bronzes were melted for recasting into such objects as swords and armor.

As for the boat itself, no conclusive remains have been uncovered. Items found nearby—a lead used for depth sounding, a ring for attaching sails to a mast, and copper nails (above left)—could have belonged to other ships.

SURVEYING THE BROKEN BRONZES

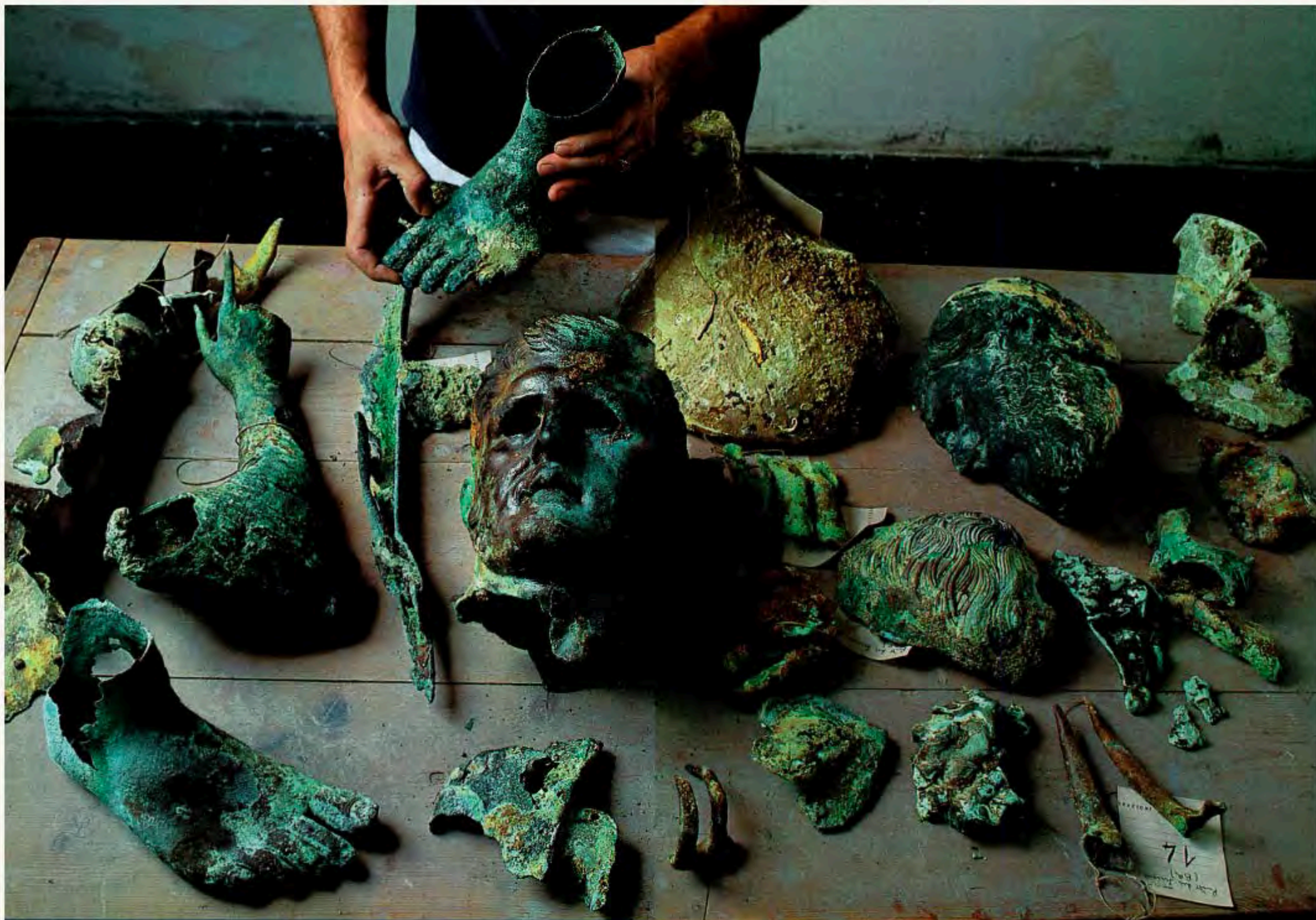
Some scholars believe that sailors jettisoned bronze cargo to lighten their boat during a storm.

Centuries later divers measure, draw, and photograph the bronze objects. Combined with satellite data, their records will make an accurate survey. The diver at far right guides a sorbona, a device that sucks sand from buried artifacts.



The Roman port of **Brindisi** was the terminus of the Appian Way and gateway to the east.

Main area of finds:
1 female head; 2 nude torso (pages 98-9);
3 statue of man wearing toga (page 95); 4 foot, first artifact found (page 92);
5 small hand; 6 forearm and hand missing some fingers; 7 forearm and hand with extended finger; 8 head, Hellenistic prince (pages 92, 98-9); 9 half head (page 93); 10 giant arm (pages 94-5); 11 head fragment



ANCIENT BRONZE body parts fill a table in a makeshift morgue. The male head at center was quickly named the Hellenistic prince for its resemblance to a well-known statue in

the National Roman Museum. The foot at lower left was the first item found. Amphorae fragments (not shown) discovered at the site may help date the sinking of the bronzes.



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Desiderio Camassa thought he must be uncovering a bronze leg as he cleared sand from a new discovery. But as he gingerly examined the piece, he saw the bend of a colossal elbow. However huge the arm, it was fragile, and divers filled a balloon with air from a scuba mouthpiece to gently raise it to the surface (left). Measuring 56 inches, the arm (below) must have belonged to a statue about 12 feet tall.

To make a thorough search, six teams of two divers descended daily, each team working a one-hour shift. They conducted

their investigation by sweeping handheld metal detectors over the seafloor. Whenever the audio tone of the detector sounded, a diver would mark the spot with a white cork float and return later to excavate it.

Artifacts were often found within hollows in the rocky bottom, which was covered with as much as two feet of sand. All told, an area about the size of a tennis court was excavated.

Some objects were covered with layers of growth that had to be cut away with a knife. "The dead algae is soft like a carpet, but difficult to cut," says diver Giovanni Lattanzi, who works

without gloves because "it improves your sensing ability."

It's also risky, as Lattanzi found out when he sliced open a finger. He examined the wound at a depth where no red is visible and found it "strange" to see himself "bleeding green blood."

Divers treated the bronzes much more carefully. The Augustan-era sculpture of a life-size male in a toga (above) was secured on a foam-covered wooden frame to cushion its rescue. A gaping fracture in its side and a thin, almost demineralized body gave evidence of bronze high in lead, an alloy common in ancient Roman sculpture. Careful inspection showed that the statue's head had been cast separately and soldered in place.

To extend the search, especially for the wreck of the missing boat, a navy hydrographic vessel employed a proton magnetometer—a powerful metal detector—and side-scan sonar, which gives three-dimensional readings. Some suspicious profiles were recorded, and more work may be done, possibly with a submarine robot.





Centuries of encrustation have not obliterated the grace of a female hand (above), which was once adorned with two rings. Corrosion transformed another hand (above right), reducing it to a blackened claw. The bronze has been eaten away by marine salts, so that only a remnant of good bronze at the tip of the thumb survives.



Removed for restoration, the stone right eye of the philosopher (top) had been encased in thin copper sheets fashioned into eyelashes.

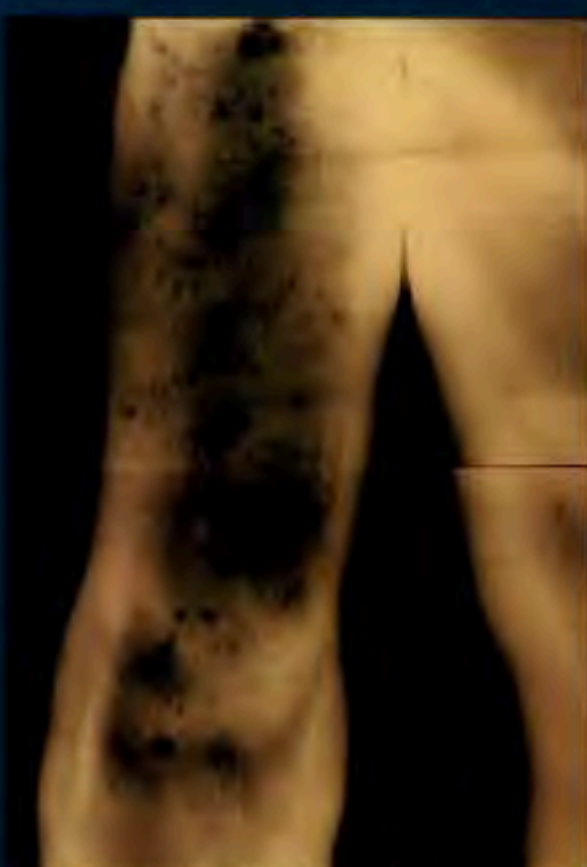
In 1972 divers raised a gigantic foot (right) from about the same location, although precise geographic coordinates were not taken. This bronze, of the late Roman imperial era, is consistent with the recent discoveries and may even have been part of the same cargo.





Head and torso of the Hellenistic prince (right) are united by computer in an approximate reconstruction that suggests the two pieces were once one. Fractures above the right elbow, visible in an X ray (below), may have been made with the intent of breaking the arm apart. The sculpture shows signs of deliberate breaking where the left arm had been soldered to the shoulder.

Remnants of the original clay core were removed from inside the prince's head by Erzsebet Lantos (top left), a necessity



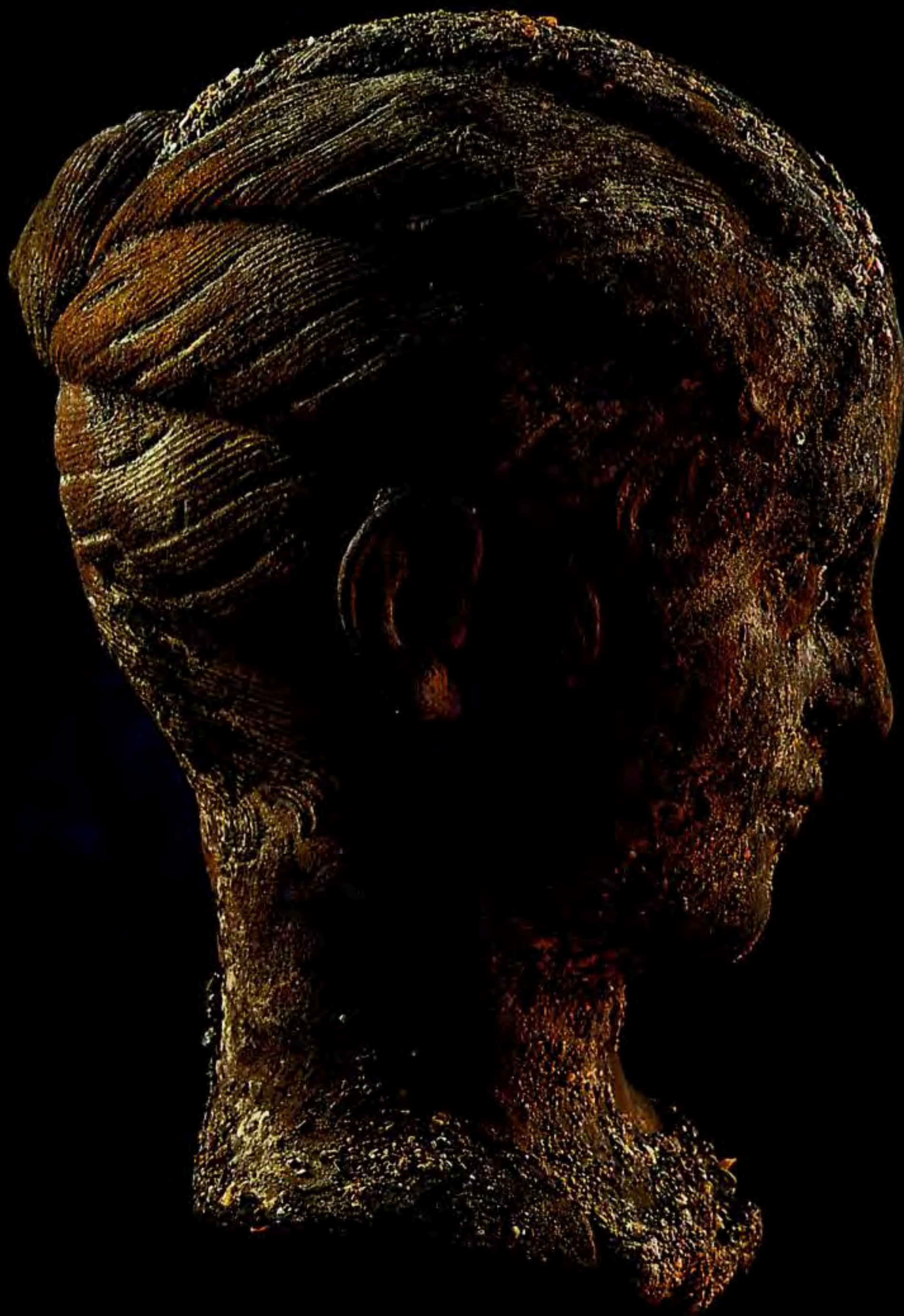
ARCHAEOLOGICAL SUPERINTENDENCY, FLORENCE

because the clay is laden with sea salts, which would have continued to damage the bronze. Under fiber-optic light Renzo Giachetti (left) uses a scalpel to scrape minute deposits from the back of the torso.

Restoration revealed that the sculptor had finished his creation carefully, patching small defects created by air bubbles trapped in the original casting.

Both Lantos and Giachetti work toward conserving the bronze while remaining faithful to the original. "You are preserving his story," said Lantos, "wrinkles and all."





Tiny shells spangle the profile of a young Roman woman of the second century A.D. (left). She may be Faustina, wife of the emperor and Stoic philosopher Marcus Aurelius, according to Angela Marinazzo, director of the Provincial Archaeological Museum in **Brindisi**.

"She is my favorite," says Marinazzo. "We had been working late washing the pieces as they were coming in. Someone said all we're missing is a young girl. The next day Faustina showed up."

Her hair is pulled tightly back into a style Italians call *melone* because it resembles a cantaloupe. Reliefs on coins of the young Empress Faustina show her with this coiffure.

What may be the portrait of a young and still serene Tiberius (above), who reigned during the



time of Christ, has been badly blackened by sulfur produced by algae. At its worst, the reaction destroys the fine detail of the bronze caster's art.

The fragile **Brindisi** bronzes are a windfall for archaeologists and art historians alike. "There are so few bronzes from classical times," says Carol Mattusch of George Mason University in Fairfax, Virginia.

"Pliny mentions that Athens had 3,000 bronze statues. This collection gives us a wonderful sense of what it must have been like to stroll through a city in ancient times." □