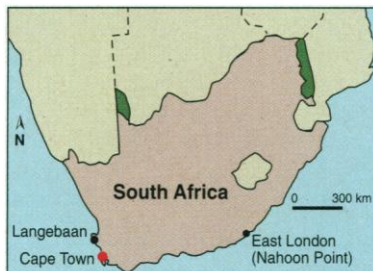


Humanity's Baby Steps

A pair of human footprints that has been on display in a South African museum for the



South African beaches have yielded two sets of ancient footprints.

past 34 years has now been dated as being approximately 200,000 years old—significantly older than the so-called Langebaan footprints dated at 120,000 years old.

Known as the Nahoon

prints, the marks were discovered by chance by two municipal workers on a beach in 1964. Carbon-14 dating then put them at roughly 30,000 years old. The revised dating, based on a relatively new technique called thermoluminescence (TL), was led by Dave Roberts, a geologist at the Council for Geoscience in Cape Town. In 1995 Roberts discovered the Langebaan prints, the oldest known prints from anatomically modern humans. He said he wanted to do a fresh dating of the Nahoon prints because they were formed in a similar coastal environment. Because carbon dating won't work past 40,000 years, the researchers used TL, which is based on a radiation "clock" in mineral sediments that reveals when the material was last exposed to sunlight.

The 200,000-year age corresponds with the geological evidence at the site, where wave patterns indicate the prints were already in place at the time of the high water levels of the last interglacial 130,000 years ago, says Roberts. That era has also yielded the oldest skeletal evidence for anatomically modern humans.

Archaeologist Hilary Deacon of the University of Stellenbosch cautions, however, that TL is still somewhat experimental. In his view, nearby Middle Stone Age artifacts suggest an age closer to 90,000 years.

If the dating holds up, the prints are a major addition to scanty physical evidence on the evolution of early modern humans, says Stanford archaeologist Richard Klein: "Unlike the Langebaan footprints, which are relatively vague, the Nahoon Point footprints are compellingly human."

Liberal Arts Degrees Not Worthless

Contrary to the popular image of philosophy Ph.D.s forced to drive taxicabs for a living, a new study has found that in Canada, at least, advanced degrees in the liberal arts pay well and are at least as cost-effective as those in science.

University of British Columbia economics professor Richard Allen calculated the value of a master's or Ph.D. degree by comparing the total cost of an education to projected annual income from graduation to age 65. His analysis, done for the Social Sciences and Humanities Research Council of Canada (SSHRC), was based on data from two 1995 government surveys, one on the employment of 122,463 advanced degree-holders; the other on the earnings of 2107 degree-holders from 1970 to 1995.

Allen found that a liberal arts degree frequently translated into a well-paying professional job. And because liberal arts majors are cheaper to educate—he estimated the cost of an advanced degree at \$60,000, compared with \$76,000 in the physical sciences—they actually proved to be more cost-effective than scientists. All told, degrees in education and commerce yielded the highest return on investment, 7.6%. The social sciences come next at 7.3%, then engineering, humanities, and health professions (excluding doctors) (6.9%), mathematics and physical sciences (6.7%), fine arts (6.5%), and agriculture and biology (5.9%).

SSHRC President Marc Renaud says he was "surprised" by the findings, as even he had been influenced by the perception that liberal arts doctorates are underemployed.

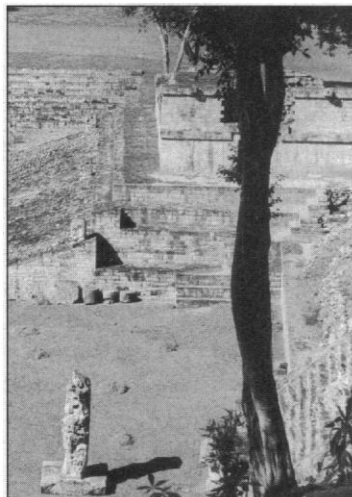
Floods Spare Mayan Sites

Thanks to years of protective efforts and a dose of luck, the hurricane that devastated Central America earlier this month and set the region back years in development left some of the area's most priceless archaeological sites intact. Scientists suspect that dozens of smaller sites were washed away—predictions unconfirmed as yet—but they're breathing easier after learning that the classic Mayan site of Copán in Honduras, as well as Ceren in El Salvador, are relatively unscathed.

Copán owes its escape to a rerouting of the Copán River to prevent erosion of the site, begun in the 1930s and reinforced early this decade, says Ricardo Agurcia Fasquelle, former lead government archaeologist for Copán. According to Agurcia, who lives in the modern town of Copán, where one family was killed in the flooding, water came within 50 meters of the acropolis—the central, excavated region of Copán—and just a few giant boulders might have

crushed it altogether. Luck also held in El Salvador, where large roofs and good drainage protected the renowned Maya-like village of Ceren, buried by a volcano around A.D. 600 and fabulously preserved.

Not all the news brought relief. Archaeologist Edward Schortman of Kenyon College in Gambier, Ohio, suspects that Naco, another site with Mayan elements in northwestern Honduras, suffered significant flooding and possible loss of artifacts. There's also nail-biting about sites in heavily flooded valleys in Honduras as well as in neighboring El Salvador and Nicaragua. But, says Agurcia, "when I think of what could have happened, I'm really relieved."



Copán rode out the storm.

New Human Right?

"Each individual has a right to a unique genetic identity."

—Harry Griffin, science director of the Roslin Institute, commenting to BBC on remarks by Italian fertility expert Severino Antinori favoring human cloning