

# RANDOM SAMPLES

edited by CONSTANCE HOLDEN

## Nailing Down Cave Paintings

Rock art has been called the “Cinderella” of archaeology, somewhere outside the mainstream because it is so difficult to date. So scientists usually have little way of knowing whether paint-



ARON MAZEL

**San art.** Vegetable fibers in paint reveal this eland to be about 320 years old.

ings on a cave wall were done by the same people who left signs of habitation. Scientists from South Africa and Canada have therefore been excited to obtain a clear provenance for a painting of an eland found in a rock shelter in the Natal Drakensburg region of South Af-

rica that links it to a group of people who lived nearby. The dating of this rock painting represents “the beginnings of a project to place one of the world’s richest rock painting records in an historical context,” says geologist Alan Watchman, head of Data-Roche Watchman, a Quebec-based consulting company on rock art.

Dating cave painting is tricky because the pigments used are often not organic and thus not amenable to radiocarbon dating, the simplest method for dating carbon-bearing substances. But Watchman and project leader Aron Mazel, an archaeologist at Natal Museum in Pietermaritzburg, found some very fine plant fibers in the red-colored paint and thus were able to put its age at about 320 years. The scientists say the date ex-

actly matches that from a charcoal sample collected from a site formerly occupied by the San, nomadic hunters and gatherers, about 15 kilometers away—the first time archaeologists anywhere have had such a precise link between an occupation site and a decorated shelter. “The painting of the eland is certainly done in [the Sans] style,” says Mazel.

Watchman suspects that rock art elsewhere contains plant fibers—but that scientists have failed to look for them because they assume any organic matter in the paintings would be material from animals, such as blood, hair, or fat.

Archaeologists are hailing Mazel and Watchman’s work as a major achievement. “It opens up a whole new window for us,” says Janette Deacon, an archaeologist at the Natal Monuments Council in Cape Town. Now, like art historians, archaeologists will be able to discuss how the style and subjects of the Drakensburg artists changed over time.

## Reason Under Fire

Concern about “political correctness” in academia is growing among some U.S. scientists who see politically tinged scholarship as part of a spreading strain of anti-intellectualism and hostility to science.

This phenomenon has concerned the National Association of Scholars (NAS), a group of traditionally minded academics, for some years. But last month the New York Academy of Sciences (NYAS) leapt into the fray with a meeting called “The Flight from Science and Reason.” Participants attacked deconstructivist scholarship that dismisses objective reality as unknowable, as well as declining academic standards, public scientific illiteracy, the animal rights movement, creationism, belief in UFOs, and alternative medicine.

The head of the NYAS, physicist Rodney Nichols, says scientists worry that anti-rationality is eroding the intellectual climate for science. For example, Harvard chemist Dudley Hershbach related at the conference that he has found increasing skepticism about the value of science among his undergraduate students. And anthropologist Eugenie Scott, head of the National Center for Science Education Inc. in El Cerrito, California, sees “hyper-relativism” among both teachers and students—“being open-minded has somehow got mistranslated into ‘science is not reliable.’”

But a reaction may be setting in. The Princeton, New Jersey-based NAS is attracting more scientists, who now make up about 20% of its 4000 members, says its head, political scientist Stephen Balch. And this spring it launched an electronic science newsletter which carries items such as a reprint of an article on “PC medicine,” news about the proposed national department of science, and a quote by feminist philosopher Sandra Harding, who thinks Newton’s *Principles of Mechanics* reflects patriarchal, exploitative Western thinking, and therefore might as well be called “Newton’s Rape Manual.”

## Merge and Purge At Wellcome

It’s official—some researchers at the former Wellcome research labs at Beckenham, Kent, U.K., will lose their jobs as a result of the company’s merger with Glaxo earlier this year. On 20 June Glaxo Wellcome announced that the Beckenham site will be closed over the next 3 years. That means 1550 staff, including 1300 involved in R&D, will either be relocated or dropped. The company has released a statement saying only that “a significant number” of the R&D staff will be relocated—with the basic researchers joining those already in the gleaming new £700 million (\$1.1 billion) Glaxo Wellcome Medicines Research Centre at Stevenage, Hertfordshire. Final decisions won’t be made until September, but some industry analysts believe the number of

scientists laid off will also be significant.

“It’s bad news for applied scientific research in this country,” says Anne Campbell, member of a U.K. parliamentary committee that last February held hearings to assess the economic effect of

the merger. Campbell adds that it may create “a lot of demoralization in the research community.”

Further retrenchment is also expected at Research Triangle Park, North Carolina, where the former Glaxo and Wellcome both have research facilities.

### THE DISMAL SCIENCE

**“If I thought the quality of research that we’re putting out is so stellar ... and essential to society ... I’d say okay. ... [But] ... when I have to evaluate benefits to society, I’d say we should spend a good deal more time teaching.”**

—Anonymous economics professor  
quoted in “Faculty Productivity,” a report by  
William F. Massy and Andrea K. Wilger of the  
Stanford Institute for Higher Education Research