Post, H. H. Shugart, *Ecology* **65**, 970 (1984); B. Bolin in *The Greenhouse Effect, Climatic Change, and Ecosystems*, SCOPE 29, B. Bolin, B. Döös, J. Jäger, R. Warrick, Eds. (Wiley, Chichester, England, 1987), pp. 93–155.
16. T. A. Boden, P. Kanciruk, M. P. Farrell, Eds., *Trends '90: A Compendium of Data on Global Change* (Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, ORNL/CDIAC-36, Oak Ridge, TN, 1990).
17. J. Houghton, G. Jenkins, J. Ephraums, Eds., *Climate Change: The IPCC Scientific Assessment* (Cambridge Univ. Press, New York, 1990), p. 13.
18. W. S. Broecker, T. Takahashi, H. J. Simpson, T. H. Peng, *Science* **206**, 409 (1979).
19. In the error analysis we used a random selection of values for each measured parameter based on their respective means and standard deviations. A large number, for example, 1000, of calculations of the calculated parameter, S_{oc}, were made with the randomly selected values for each measured parameter. Then the mean and standard deviation of S_{oc} were determined from the 1000 calculated S_{oc} values; see B. Efron, *Biometrika* **68**, 589 (1981).
20. The ^{14}C activity is expressed as $\Delta^{14}C = [(A_s/A_{ox}) - 1]1000$ in per mil, where A_s is the activity of the sample and A_{ox} is the age-corrected activity of the oxalic acid standard after ^{13}C normalization [M. Stuiver and H. A. Polach, *Radiocarbon* **19**, 355 (1977)].
21. We thank the group at NOAA–Pacific Marine Environmental Laboratory, in particular D. Feely and P. Murphy, and M. Dudley for sample collections. J. Zhang helped with sample collection and extraction. S. Moe, M. Knox, and L. Lu helped with sample extraction, and D. Wilbur oversaw the mass spectrometer measurements. P. Kroopnick provided tabulated $\delta^{13}C$ data from SCAN and ANTIPODES cruises. T. Brazunias, U. Siegenthaler, S. Smith, and P. Tans provided helpful reviews. The U.S. work was supported by NOAA's Climate and Global Change Program (NA90AA-D-AC828) and the Canadian work was supported by the Department of Fisheries and Oceans and the Panel of Energy Research and Development (Project 48115).

3 September 1991; accepted 27 January 1992

(*Continued from p. 14*)

what we know, or are troubled by, but don't know that we know (or don't admit that we are troubled by) because we don't have a satisfying explanation.

David P. Barash
Department of Psychology, University of Washington, Seattle, WA 98195

REFERENCES

1. W. D. Hamilton, *J. Theor. Biol.* **7**, 1 (1964).
2. D. P. Barash, *Sociobiology and Behavior* (Elsevier, New York, ed. 2, 1982).

■

The Search for Eve

Marcia Barinaga's article " 'African Eve' backers beat a retreat" concerning the debate about modern human origins (Research News, 7 Feb., p. 686) contains many examples of the kind of thinking that still plagues the study of human evolution. It was clear by 1987 that new methods of phylogenetic analysis for reconstructing human history would be necessary, and not just new DNA sequences from more people or a 4.0 version of some existing software package that violated present knowledge of the system (unequal sample sizes and varying rates of evolution).

Breakthroughs in extraction of DNA from human fossils must now be accompanied by better methods to absorb large data sets for analysis of variance and clustering. DNA sequences from actual fossils, not reconstructed hypothetical ancestors, are the key. Further arguments are tedious and wasteful of limited resources and predispose observers to equate evolutionary biology with street theater.

Rebecca L. Cann
Department of Genetics and Molecular Biology, University of Hawaii at Manoa, Honolulu, HI 96822

Corrections and Clarifications

The News & Comment article "Wilson slashes spending for antismoking effort" by Marcia Barinaga (13 Mar., p. 1348) erroneously stated that the California legislature approved the shut-down of California's antismoking ad campaign. The legislature approved the removal of $29 million from the smoking-initiative budget, but those funds do not influence the ad campaign. The ad campaign funding was removed by an action of the governor that did not have legislative approval.

In Joseph Palca's News & Comment article "AAAS in Chicago: Dawn of a new era?" (21 Feb., p. 918), University of Miami philosopher Kenneth Goodman's name was inadvertently misspelled.

The name of the associate vice chancellor for research at the University of Illinois, Tina Gunsalus, was inadvertently misspelled in the News & Comment article "What's left on the table" by David P. Hamilton (13 Mar., p. 1345).