

A Science Service Publication Volume 124, No. 1, July 2, 1983

E.G. Sherburne Jr. Joel Greenberg Dietrick F. Thomsen Publisher Editor Senior Editor/

Joanne Silberner Judy Klein

Physical Sciences Managing Editor Production/Design Director

Behavioral Sciences

Wray Herbert Joan Arehart-Treichel Linda Garmon Cheryl Simon Julie Ann Miller Janet_Raloff, Ivars Peterson Jonathan Eberhart

Biomedicine Chemistry Earth Sciences Life Sciences Policy/Technology

Pamela Taulbee Penny D. Sackett Jane M. Livermore Space Sciences Science Writer Interns

Donald R. Harless

Books Business Manager

Scherago Associates Advert Fred Dieffenbach, Sales Director Advertising 1515 Broadway, New York, N.Y. 10036

Copyright * 1983 by Science Service, Inc., Editorial and Business Offices, 1719 N St., N.W., Washington, D. C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is archibited.

Subscription Department 231 West Center Street, Marion, Ohio 43302

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50; 3 yrs., \$67.00. (Foreign postage \$5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call (1) 800-247-2160. Printed in U.S.A. Second class postage paid at Washington, D. C. Title registered as trademark U.S. and Canadian Patent Offices. Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D. C. 20036. (202-785-2255) ISSN 0036-8423

This Week

- Shuttle 7: 'We Pick Up and Deliver'
- 4 Under zero-gravity conditions, splitting up is easy to do
- 5 Senile dementia linked to immunity genes
- 6 New way to see old magnetic domains
- 6 Marine fossils hint Antarctic ice cycles
- Siberian site wins vote for boundary 6
- 7 New reports urge action on acid rain
- 7 Study shows stress decreases immunity

Research Notes

- 12 Biology
- 14 Environment
- 14 Biomedicine

Articles

8 Lucy's Family Problems

Cover: These two adult males both lived approximately 3 million years ago, but anthropologists cannot agree on their relationship: Are they representatives of the same early hominid species, or was A. afarensis (right) from East Africa ancestral to the South African A. africanus? Did these animals ultimately evolve into modern humans, or were they already on the road to extinction? (Photos courtesy of South African Journal of Science)



Departments

Letters

13 Books

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation. Board of Trustees — President, Glenn T. Seaborg; Vice President, Gerald F. Tape; Treasurer, Willis Harlow Shapley; Secretary, Julius Duscha; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; Milton Harris; Hilleary F. Hoskinson; Elizabeth F. Neufeld; O.W. Riegel; H. Guyford Stever; John Troan;

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

Letters

Ribs II

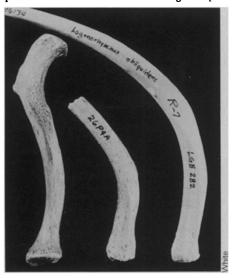
Dr. Noel Boaz suggests in his June 4 letter that SCIENCE News and I have been unfair in our treatment of his work on the Sahabi dolphin rib. Boaz is correct in introducing his letter with the comment "Tim White has not demonstrated that the Sahabi clavicle is a dolphin rib." Our paper demonstrating the cetacean affinities of his fossil has not yet been published in the AMERICAN JOURNAL OF PHYSICAL ANTHROPOL-OGY but is post-proof.

Dr. Boaz presented a poster session that misrepresented the analysis of that paper (coauthored by myself and Suwa, Watters, Richards and Barnes) at the annual national meetings of the American Association of Physical Anthropologists last April. This presentation prompted Wray Herbert's Science News report (SN: 4/16/83, p. 246).

Dr. Boaz's presentation and misrepresentation of our research at this meeting, months before we had even had a chance to publish, was not only surprising. It was, in fact, unethical because Boaz had reviewed our paper for the AJPA

But Boaz claims that I was unfair and engaged

in what he terms "ad hominem" sophistry in my interview with SCIENCE NEWS. I actually argued with ad delphinem actuality. It is time to set the record straight. Boaz's description of his dolphin rib fossil states that it has a sigmoid [S-



shapedl curvature characteristic of primate clavicles. As is apparent from the accompanying photograph of the fossil (center), dolphin rib (right) and chimp clavicle (left), there is no such sigmoid curvature in the fossil. In medicine Boaz's description might have been called malpractice. In biochemistry his portrayal would have been termed fraud. I [was] more than kind in [my] remarks about Dr. Boaz's identifications and behavior, as was SCIENCE News

> Tim D. White Univ. of Calif. Berkeley, Calif.

Bluebird fans

Three years ago, at my college graduating class's 15th reunion, we were all asked to identify the most moving experience we had had within the past few years. Most of my classmates spoke of births and deaths or career accomplishments, not surprisingly.

In my case, after thinking the question over carefully, I had to conclude that the single event that stood out most glowingly in my recent life was the appearance of a nesting pair of bluebirds at my home in Leominster, Mass. I had

Continued on p. 13

JULY 2, 1983

3