SEKE NEVS®

The Weekly Newsmagazine of Science

Science Service Publication Volume 147, No. 15, April 15, 1995

Alfred Scott McLaren Patrick Young Blair Burns Potter Publisher Editor Managing Editor Production/Design

David Lindley Janet Raloff

Dan Skripkar

Director
Associate Editor
Senior Editor
Environment/Policy
Astronomy

Behavioral Sciences

Ron Cowen Bruce Bower Richard Lipkin Richard Monastersky

Tina Adler

Chemistry/ Materials Science Earth Sciences General Science Life Sciences/ Biomedicine

Ivars Peterson Damaris Christensen Jocelyn Kaiser Cait Anthony Donald R. Harless

Kathleen Fackelmann

Mathematics/Physics Editorial Assistant Science Writer Intern Books/Resource Manager Advertising/Business

Manager

SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$44.50 for 1 year or \$78.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, Inc., 1719 N Street, N.W., Washington, D.C. 20036. Second-class postage paid at Washington, D.C., and additional mailing office. POSTMASTER: Send address changes to Science News, Po. Box 1925, Marion, Ohio 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes, must be provided.

Copyright © 1995 by Science Service, Inc. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A. on recycled paper. ♠

Editorial and Business Offices:

1719 N St. N.W., Washington, D.C. 20036 (202-785-2255)

Republication of any portion of SCIENCE NEws without written permission of the publisher is prohibited.

Subscription Department:

P.O. Box 1925, Marion, Ohio 43305 For new subscriptions only, call 1-800-247-2160. For customer service, call 1-800-347-6969.

This Week

228 Explosive Expansion of Atomic Nuclei 228 Scientists 'grow' replacement heart valves 229 Gene copying aids prostate tumor growth 229 World War II vets: Physical backlash 230 Keck finding: Did stars predate galaxies? 230 Does the Milky Way hide its black hole? 231 More ways mother's milk fights disease 231 Tamoxifen derivative shrinks mouse tumors

Research Notes

237 Anthropology237 Chemistry239 Physics

Articles

232 Criminal Intellects

Cover: New data suggest that the low IQs of many hard-core delinquents reflect subtle brain disruptions that occur early in life and severely impair verbal abilities. The same findings indicate that a lifelong tendency to think and behave impulsively contributes as much to criminality as having a low IQ. (Artwork: Sol Aquino, "Communication Breakdown," 1991)

234 PetaCrunchers

Departments

226 Books227 Letters



Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the Directory of Student Science Training Programs for Precollege Students.

Board of Trustees — Chairman, Dudley Herschbach; Vice Chairman, Gerald F. Tape; Secretary, David A. Goslin; Treasurer, Willis Harlow Shapley; Joseph W. Berg Jr.; Robert W. Fri; J. David Hann; Shirley M. Malcom; Elena O. Nightingale; Ben Patrusky; Peter H. Raven; H. Guyford Stever; Sanford J. Ungar; Deborah P. Wolfe. Honorary Trustees — Chairman Emeritus, Glenn T. Seaborg; Edward Bliss Jr.; Bowen C. Dees; O.W. Riegel; John Troan.

President: Alfred Scott McLaren; Vice President and Business Manager: Donald R. Harless.

Letters

Instinctive take on warfare

I find the debate among anthropologists about the roots of warfare almost laughable ("Seeds of Warfare Precede Agriculture," SN: 1/7/95, p.4). If one has the courage to throw off the thought shackles of "special status" for humans, one can see that organized conflict preceded not only agriculture but all species of *Homo*.

Lions, hyenas, wolves, and many other predatory, social mammals practice what could be termed warfare. The universal instincts to produce an excess of young and to seek food naturally result in territorial aggression. Humans, like lions, are not driven solely by reason. All brains service instincts, and the large brains of humans merely provide these fundamental drives with a very powerful tool!

Homo is not what it pretends to be, namely, sapient.

Russell W. Agreen Fulton, Md. Some scientists argue that we need to shed the "thought shackles" often used to relegate instincts to the status of a few crude reflexes rather than to view them as a multitude of evolved brain mechanisms that underlie decision making and reason (SN: 1/29/94, p.72).

Drawing conclusions

The unintentional reversal of the photograph published with "French cave yields Stone Age art gallery" (SN: 1/28/95, p.52) actually highlights an interesting aspect of these remarkable paintings and their creators.

Almost all the animal pictures shared thus far with the public were drawn facing the observer's left. The preponderance of left-facing images may be coincidence, or it may be one of the oldest human records supporting the dominance of the right cerebral hemisphere in the realm of visual and artistic perception.

The prehistoric artists who executed this stunning display were probably right-handed, since it is unlikely that the brain center for handedness would be in the same hemisphere as their strongly represented visual sense.

Sheldon Peck Newton, Mass.

Violence and disorders

I wish to raise a concern with regard to the MacArthur Foundation study ("Law and Disorders," SN: 1/7/95, p.8). While it will go far in supporting more accurate assessment of individual circumstances, it would have a greater impact on service outcomes if it integrated into its interpretations the social context from which mental illness emerges.

What continues to be lost in discussing the abhorrent circumstances of severe and persistent mental illness is the fact that individuals who seek or are coerced into seeking treatment are often themselves victims of unremitting violence.

> David W. Hilton New Hampshire Department of Health and Human Services Concord, N.H.

APRIL 15, 1995 227