# CIENCE NEWS®

Science Service Publication of 112/August 20, 1977/No. 8

101. 112/August 20, 13/7/10. 0	
OF THE WEEK Antiviral drugs Space shuttle up and OK Overobedience in children Media and the paranormal Lobster defense response HEAO satellite orbited	116 117 117 118 118 119
RESEARCH NOTES Earth Sciences Physical Sciences Biomedicine Behavior ARTICLES Fractal phenomena Voyager's message	120 120 121 121 122 124
DEPARTMENTS Letters Books	115 126

COVER: This perforated block was obtained rom a solid cube after a succession of symmetric and systematic excisions. If surgery is continued, the volume of this Sierpinski sponge—so-named for its mathematician-innovator—will vanish, while the area lining its holes will accumulate unboundedly. This kind of paradoxical happenstance characterizes fractals, a fascinating class of objects that inhabit a kind of dimensional twilloth zone See p. 122 kind of dimensional twilight zone. See p. 122. (II-lustration: Fractals: Form, Chance, and Dimension by Benoit B. Mandelbrot, W. H. Freeman and Co., © 1977 by author/from Studies in Geometry by Leonard M. Bluenthal and Karl Menger, W. H. Freeman and Co., \$ 1970)

**Publisher** E. G. Sherburne Jr. **Editor** Kendrick Frazier

Senior Editor and

**Physical Sciences** Dietrick E. Thomsen **Behavioral Sciences** Joel Greenberg Biomedical Sciences Joan Arehart-Treichel Life Sciences Julie Ann Miller **Policy and Technology** Janet Raloff **Space Sciences** Jonathan Eberhart

Michael A. Guillen

Staff Reporter Contributing Editors:

Lynn Arthur Steen (mathematics) Robert J. Trotter, John H. Douglas

Michelle Galler Riegel **Assistant Editor Art Director** Dale Appleman Assistant to the Editor Evelyn Harris **Books** Jane Livermore **Business Manager** Donald Harless Advertising Scherago Associates, 11 W. 42nd St., New York, N.Y. 10036

Copyright © 1977 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Editorial and Business Offices 1719 N Street, N.W. Washington, D.C. 20036

Subscription Department 231 West Center Street Marion, Ohio 43302

Subscription rate: 1 yr., \$12.50; 2 yrs., \$22; 3 yrs., \$30. (Add \$2 a year for Canada and Mexico, \$3 for all other countries.) Change of address: Four to six weeks notice is required. Please state exactly how magazine is to be addressed. Include zip code

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)TWX 710-822-9433 SCIEN NEWS.

#### Male cycles keyed to mate's?

Alice J. Dan should have included some males who live alone as well as some males who live with other males in her study of male cycles (SN: 7/23/77, p. 58). This is particularly important in the light of Michael J. Russell's study indicating that olfactory signals tend to synchronize the cycles of women who live together (SN: 7/2/77, p. 5).

Since Dan's study group consisted entirely of men who live with women, olfactory signals from the women may have affected the men. So, her study can only suggest that married men may undergo monthly cycles

K.R. Mullin Hatboro, Pa.

# In defense of Jensen

I assume you published Sadu Sadanand's diatribe (Letters, July 23) on the assumption that his antiscience jargon would expose itself for what it was. This was certainly successful, but there was an additional point raised that deserves mention.

Sadanand says that Arthur Jensen's theses are based exclusively on Cyril Burt's studies. This is an impression that the press, with its usual selective courageousness, has allowed to go unchallenged and unresearched. In fact, the best of many studies supporting heredity over environment was that of the Medicogenetical Institute of Moscow, which placed a thousand sets of identical twins into selected environments while in their infancy, a decade before the 1934 testing. The result was, as usual, wildly pro-heredity. Stalin-who would have loved Science for the Peoplepromptly abolished the Institute. The Institute's director "confessed his ideological error and was shot." (Garrett Hardin, Nature And Man's Fate)

The example of the Medicogenetical Institute illustrates two points. First, there is much evidence besides Burt's to base Jensen's conclusions on, even if the flimsy attack on him were more substantial in content. Equally important, it demonstrates that the threat to free inquiry comes from the left rather than from the right. This is a fact that the scientific community seldom considers, even at the cost of leaving many of its most tragic martyrs unmourned.

Robert W. Whitaker Washington, D.C.

While Sadu Sadanand's letter expresses his concern for the plight of blacks and other disadvantaged minorities in the United States today and his outrage at Arthur Jensen's research into the factors which determine IO, it would be counterproductive to his cause and the scientific tradition for the AAAS to reconsider its nomination of Jensen as a fellow as he suggests. Nomination to the AAAs is based on legitimate and significant scientific research and not on the popularity of the theory or results. Correctness of the theory is not even that important a factor since scientific "proof" sometimes takes decades to achieve.

Donald H. Gudehus Hawthorne, Calif.

# Lot of nothing

Whether product, power plant, President, or whatever, if you compare something with nothing, and consider only the possible future harmful effects, then nothing is going to win, hands down, nearly every time. However, nearly every time, the proper comparison is not with nothing, but with something else. In the case of saccharin (SN: 7/2/77, p. 13), the proper comparison would have been with other sweeteners. What happens to rats that are force fed massive amounts of honey, maple syrup or pure cane sugar?

> John O'Brien Washington, Pa.

## Russian study

The claim that mean annual daily radiation values for the upper atmospheric boundary of the various planets had never been published prior to the work of J.S. Levine, D.R. Kraemer and W.R. Kuhn (SN: 6/11/77, p. 380) is not true. A study quite similar to theirs was published in a Russian journal in 1975 by the famous atmospheric scientist A.S. Morin: "Upper-boundary Isolation of the Atmospheres of the Planets of the Solar System" IZVESTIYA, ATMOSPHERIC AND OCEANIC PHYSICS II (9:883, 1975), English translation published in 1976 by the American Geophysical Union and the American Meteorological Society. So it seems for once that the Russians have indeed beaten us to the punch, albeit a relatively insignificant one.

Peter J. Havanac Major, USAF Fort Collins, Colo.

### Loren Eiseley

Loren Eiseley, a poet of the mind, of history, of science, of conjecture, of symbolism. A gentle, perceptive poet.

Thank you for your kind eulogy (SN: 7/23/77, p. 63). I too trust he has found the great mystery he sensed. He will be missed.

J. W. King Abilene, Tex.

SCIENCE SERVICE

Institution for the public understanding of science founded 1921; a nonprofit corporation.

Board of TrusteesNominated by the AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE: Deborah P. Wolfe, Queens College of City University of New York; Bowen C. Dees, The Franklin Institute; Athelstan Spilhaus, National Oceanic and Atmospheric Administration. Nominated by the NATIONAL ACADEMY OF SCIENCES: Gerald F. Tape (Vice President), Associated Universities; Allen V. Astin, Bethesda, Md.; Glenn T. Seaborg (President), University of California, Berkeley. Nominated by the NATIONAL RESEARCH COUNCIL: Gerald Holton, Harvard University; Joseph W. Berg Jr., National Research Council; Aaron Rosenthal, Washington, D.C. Nominated by the JOURNALISTIC PROFESSION: Edward Bliss Jr., Newburyport, Me.; Julius Duscha, Washington Journalism Center; O.W. Riegel (Secretary), Glasgow, Va. Nominated by E.W. SCRIPPS TRUST: Milton Harris (Treasurer), Washington, D.C.; Edward W. Scripps II, Edward W. Scripps Trust; John Troan, Pittsburgh Press. Troan, Pittsburgh Press.

Director: E.G. Sherburne Jr.; Assistant Director: Dorothy Schriver: Business Manager: Donald R. Harless; Things of Science: Ruby Yoshioka

AUGUST 20, 1977

115