

OF THE WEEK

Controlled nuclear fusion	324
Nabatean find: Judeo past	325
Mathematics education	326
Preventing brain pain	326
Cell-growth control process	327
Lasker awards	327

RESEARCH NOTES

Biology	331
Physical Sciences	331

ARTICLES

Language origins	332
------------------	-----

DEPARTMENTS

Letters	323
Stars	330
New products	330
Books	334

COVER: For all the diversity of the world's numerous languages (top to bottom: Armenian, Classical Greek, Buginese, Arabic, Punjabi, Batak, Amharic, Sanscrit, Cherokee, Oriya) the capability for language is a universal element in the human mind. The differences and similarities are the raw material for the science of linguistics, whose origins are the subject of the first half of Robert Trotter's two-part series on the evolution of language. See p. 332. (Illustration: Dale Appleman)

Publisher	E. G. Sherburne Jr.
Editor	Kendrick Frazier
Senior Editor and Physical Sciences	Dietrick E. Thomsen
Senior Editor and Behavioral Sciences	Robert J. Trotter
Biomedical Sciences	Joan Arehart-Treichel
Biology/Chemistry	Janet L. Hopson
Science and Society	John H. Douglas
Space Sciences	Jonathan Eberhart
Contributing Editor/ Mathematics	Lynn Arthur Steen
Copy Editor	Michelle Galler Riegel
Art Director	Dale Appleman
Assistant to the Editor	Susan Strasburger
Books	Margit Friedrich
Advertising	Scherago Associates, Inc. 11 W. 42nd St. New York, N.Y. 10036 Fred W. Dieffenbach Sales Director

Copyright © 1975 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS 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., \$10; 2 yrs., \$18; 3 yrs., \$25. (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). Cable SCIENCE. Telex 64227.

NOVEMBER 22, 1975

LETTERS

Grant titles from history

"Grant Titles from History" (SN: 10/25/75, p. 266) was cute, but I think it's worth noting that *all* the great scientist-researchers referred to in the piece did their work *without* "benefit" of government subsidy. (It's true that Charles Darwin did his field work in a vessel of the Royal Navy, but his father footed his bills.)

Scientists concerned about political meddling in scientific endeavor (a concern I share) ought to seek support for their work in the private sector. Political money inevitably brings with it political meddling. Politicians and private citizens—including scientists—concerned about misapplication of taxpayers' dollars ought to see to getting government completely out of the grantsmanship racket. The *truly* silly projects would evaporate just as soon as the public trough was closed to the scientific (?) grantsmen. "*Se tu sarai solo, tu sarai tutto.*"

Karl T. Pflock
Arlington, Va.

Your article "Grant Titles from History" under the heading "Off the Beat" is just that. The criticisms of the fictional grant proposals read more like those of a National Science Foundation project director than of a Congressional legislative aide. The question to ask is not whether Congress would not approve these ideas, but whether the NSF would!

The article misrepresents the efforts of some concerned Congressmen to improve the NSF for the benefit of scientific research. Rep. Conlan of Arizona and Sen. Helms of North Carolina have introduced legislation (H.R. 9892 and S. 2427) aimed at trying to establish a fair and honest peer review procedure and at getting the NSF back to supporting basic rather than fashionable research.

I doubt whether the NSF would fund any of the listed proposals. The first might have a chance if the title were altered to read "Perturbation of space and time at extreme velocities with implications for mass-energy relationships and especially for bio-inorganic pollution control and cancer therapy." The others are hopeless.

Philip C. Keller
Tucson, Ariz.

More on SI units

There can hardly be a quarrel with the basic considerations that prompted Professor

Horn's letter regarding the International System of Units (SN: 10/18/75, p. 243). But Horn appears not to recognize certain difficulties that arise with a sudden, total rejection of all other traditional units, some of which are discussed in your editorial comment on his letter.

In spite of the desirability of a universally recognized and understood system of units, some aspects of jumping suddenly to *exclusive* use of the International System seem to me unfortunate and probably unwise. Not too long ago the CGS System seemed to be universally understood and useful internationally. It still has some advantages associated with general usage, and it is still in rather widespread use. To discard some parts of it will involve a good deal of difficulty in interpreting a great bulk of still-important earlier scientific literature. If we abandon the angstrom, study of immense amounts of past literature in the area of spectroscopy will become substantially more difficult to dovetail with future literature. Similar considerations exist regarding abandonment of the gauss in the area of magnetism. Substitution of "hertz" for cycles per second, while appropriate as a recognition of Hertz's discovery in the field of electromagnetic waves, has the disadvantage of losing the obvious physical implications of the older notation.

I think such arguments as these are important to students and to the lay public to which SCIENCE NEWS is largely addressed, and are not negligible to the scientists who read it for information in other fields as well as their own.

Philip S. Riggs
Professor of Astronomy
Drake University
Des Moines, Iowa

Amniocentesis

An article on amniocentesis (SN: 11/8/75, p. 294) refers to "babies afflicted with mongolism or other serious chromosomal defects—defects that could be detected and averted before the child is born." As you probably know, the only way to avert such defects is not to allow the child to be born. Although it may be possible to remedy certain simply inherited defects if detected by amniocentesis, this does not apply to chromosomal aberrations. I believe readers who are not biologists may misinterpret the foregoing quote.

David C. Rife, Ph.D.
Clewiston, Fla.

Address communications to Editor,
Science News, 1719 N Street, N.W.
Washington, D.C. 20036

SCIENCE SERVICE

Institution for the Popularization of Science founded 1921; a nonprofit corporation

Board of Trustees—Nominated 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 Spiilhaus**, National Oceanic and Atmospheric Administration. Nominated by the NATIONAL ACADEMY OF SCIENCES: **Gerald F. Tape**, 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**, National Academy of Sciences. Nominated by the JOURNALISTIC PROFESSION: **Edward Bliss Jr.**, American University; **Julius Duscha**, Washington Journalism Center; **O. W. Riegel** (Secretary), Washington and Lee University. Nominated by E. W. Scripps Trust: **Milton Harris** (Treasurer), Washington, D.C.; **Edward W. Scripps II** (Vice President and Chairman of the Executive Committee), Edward W. Scripps Trust; **John Troan**, Pittsburgh Press.

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

323