A Science Service Publication Vol. 108/July 12, 1975/No. 2 Incorporating Science News Letter

	T				

O: :::E WEEK	
Value of the placebo	20
NSB peer review process	20
Inflation limits research spending	21
The Mediterranean's "crisis of salinity"	21
Anisotropy in cosmic rays	21
The "quiet" cerebral hemisphere	22
Psi-particles and the sun	22
Ice ages and the galaxy	23
Recipient of Priestley medal	23

### **RESEARCH NOTES**

Technology	24
Astronomy	24
Chemistry	25
Biomedicine	25

## **ARTICLES**

Blending science and winemaking	26
Black holes threaten physics laws	28
Victory for mental-health law	30

### **DEPARTMENTS**

Books	18
Letters	19
Off the Beat: Kafkaphysics	29

COVER: The stomping and squishing are all but over. Bacchanalian winemaking has given way to vititechnology and wine science. A department of professors and students at the University of Californic of Decision 1997. nia at Davis leads the merry march toward a super-grape. See p. 26. (Illustration: Ann Lunsford)

**Publisher** Editor

E. G. Sherburne Jr. 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 Hopson Weinberg Science and Society John H. Douglas Space Sciences Jonathan Eberhart

Contributing Editor/

**Mathematics** Lynn Arthur Steen Copy Editor Joyce Seidman **Art Director** Dale Appleman Assistant to the Editor Esther Gilgoff Margit Friedrich **Books** Advertising Scherago Associates, Inc.

11 W. 42nd St. New York, N.Y. 10036 Fred W. Dieffenbach

Copyright © 1975 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS is strictly prohi-

**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 SCIENSERV. Telex 64227.

# Futurism and the future

In his analysis of futurism, John Douglas makes no secret of proceeding from the premise that our civilization and our freedom from tyranny are based upon "objective research and rational thought." His conclusions are therefore no better than this highly suspect premise. I guarantee that there are many who would challenge it, including those of us who next year will be honoring our nation's heroes. For heroism has only chance association with purely objective research and reasoning. By actual definition, it is scarcely "objective" to dedicate, risk, or sacrifice one's life for his neighbors' or descendants' benefit!

On the other hand, every tyrant, every true enemy of civilization whom heroes have fought, has had no trouble enlisting the services of great numbers of "objective" scientists and schemers. The medical experiments in Nazi prison camps were certainly objective. ("Too much so!" the nonscientific observer might comment.) And Machiavelli and his Borgias came about as close

to being purely rational as one can be.
Of Machiavelli, H. G. Wells said, "His ruling thought, his great contribution to political literature, was that the moral obligations upon ordinary men cannot bind princes." Right there in Machiavelli's footsteps, Douglas, in demurring to futurists' talk of humanizing science, seems actually to be asserting, "Moral obligations upon ordinary men cannot bind scientists!" Well, if they cannot, then the fate of civilization is already sealed. For all of us, as many futurists are trying to point out, and as a 'progress''-oriented reading of history may fail to reveal, are increasingly at the mercy of the scientists.

> Warner Clements Beverly Hills, Calif.

Concerning Hazel Henderson's view of modern science as over-rationalistic, she is three-quarters of a century behind. Since relativity, it has been plain to the science community that there will always be a degree of uncertainty in anyone's model of reality; rational absolutes are out. It is true that specialists have failed to solve the problems facing the world. However, the "people" will not be able to solve them either, because there are no absolute solutions, only measures which will allow a majority to survive amidst the problems. And it is the "people," not the specialists, who have delayed even partial solutions from taking effect.

People will never vote to discipline themselves in the use of resources. Only a dictatorship of futurists will be able to forcibly maintain the required balance between consumption and supply to keep mankind from devouring itself. The "political action network" idea is futile, and, I believe, only a token gesture to the masses to win their initial support for futurists' ideas.

Stephen E. Schlarb Hobbs, New Mexico

(An unsolicited and somewhat tangential comment: Science deserves careful, critical scrutiny, like all institutions and activities. But much of the anti-science rhetoric tossed about so easily these days seems to be based on a total misunderstanding of what science is and isn't. It is the antithesis of dogma. On this subject I highly recommend Ch. 11, 'Knowledge or Certainty,'' of Jacob Bronowski's The Ascent of Man.—Ed.)

### Women and crime

In reference to Rita James Simon's opinion of future participation in crime by women (SN: 6/14/75, p. 384) I find her conclusions a bit naive. She believes that violent crime acts by women arise from their frustrations of being treated as second-class citizens. As women take their places next to men in the working world, white collar offenses, not violent crimes, will increase, according to Simon. What she fails to take into account is that women presently are still struggling for equality and still tend to live out their aggressions through their husbands, lovers, and families. When they achieve equality, their reasons for aggressions will not be over; women will begin to learn to express their aggressive drives themselves. They will share the heartaches and disappointments men now have and may well take part in violent crimes.

Anne Wolfe Midland, Miss.

## Praise on plasmids

A note to mention my delight with Janet Weinberg's first-rate article on plasmids (SN: 6/21/75, p. 404). It is always a pleasure to read an article by someone who is afraid neither of whimsy nor serious exposition

> Fred Hapgood Harvard University Cambridge, Mass.

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

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 Spilhaus, National Oceanic and Atmospheric Administration. Nominated by the NATIONAL ACADEMY OF SCIENCES: Gerald F. Tape, Associated Universities; Allen V. Astin, National Academy of Sciences; 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: Norman Cousins, Saturday Review; 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.

19