

New Year's Resolutions and Future Shock

American Association for the Advancement of Science

Science serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

Publisher: Richard S. Nicholson

Editor: Daniel E. Koshland, Jr.

Deputy Editor: Ellis Rubinstein

Managing Editor: Monica M. Bradford

Deputy Editors: Philip H. Abelson (*Engineering and Applied Sciences*); John I. Brauman (*Physical Sciences*); Thomas R. Cech (*Biological Sciences*)

EDITORIAL STAFF

Senior Editors: Eleanor Butz, Martha Coleman, Barbara Jasny, Katrina L. Kelner, Phillip D. Szuroni, David F. Voss
Associate Editors: R. Brooks Hanson, Pamela J. Hines, Kelly LaMarco, Linda J. Miller, L. Bryan Ray

Letters: Christine Gilbert, *editor*; Steven S. Lapham

Book Reviews: Katherine Livingston, *editor*; Teresa Fryberger

Contributing Editor: Lawrence I. Grossman

Chief Production Editor: Ellen E. Murphy

Editing Department: Lois Schmitt, *head*; Julianne Hunt, Patricia L. Moe

Copy Desk: Joi S. Granger, Margaret E. Gray, MaryBeth Shartle, Beverly Shields

Production Director: James Landry

Production Manager: Kathleen C. Fishback

Art Director: Yolanda M. Rook

Assistant Art Director: Julie Cherry

Graphics and Production: Holly Bishop, Catherine S. Siskos

Systems Analyst: William Carter

NEWS STAFF

Managing News Editor: Colin Norman

Correspondent-at-Large: Barbara J. Culliton

Deputy News Editors: John M. Benditt, Jean Marx

News and Comment/Research News: Ann Gibbons, David P. Hamilton, Constance Holden, Richard A. Kerr, Elliot Marshall, Joseph Palca, Robert Pool, Leslie Roberts, M. Mitchell Waldrop

European Correspondent: Jeremy Cherfas

West Coast Correspondent: Marcia Barinaga

Contributing Correspondents: Barry A. Cipra, Robert Crease, Karen Wright

BUSINESS STAFF

Marketing Director: Beth Rosner

Circulation Director: Michael Spinella

Fulfillment Manager: Marlene Zendell

Business Staff Manager: Deborah Rivera-Wienhold

Classified Advertising Supervisor: Amie Charlene King

ADVERTISING REPRESENTATIVES

Director: Earl J. Scherago

Traffic Manager: Donna Rivera

Traffic Manager (Recruitment): Gwen Canter

Advertising Sales Manager: Richard L. Charles

Marketing Manager: Herbert L. Burklund

Employment Sales Manager: Edward C. Keller

Sales: New York, NY 10036: J. Kevin Henebry, 1515 Broadway (212-730-1050); Scotch Plains, NJ 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); Hoffman Estates, IL 60195: Jack Ryan, 525 W. Higgins Rd. (708-885-8675); San Jose, CA 95112: Bob Brindley, 310 S. 16th St. (408-998-4690); Dorset, VT 05251: Fred W. Dieffenbach, Kent Hill Rd. (802-867-5581); Damascus, MD 20872: Rick Sommer, 11318 Kings Valley Dr. (301-972-9270); U.K., Europe: Nick Jones, +44(0647)52918; Telex 42513, FAX (0647) 52053.

Information for contributors appears on pages 35–37 of the 4 January 1991 issue. Editorial correspondence, including requests for permission to reprint and reprint orders, should be sent to 1333 H Street, NW, Washington, DC 20005. Telephone: 202-326-6500. **Advertising correspondence** should be sent to Tenth Floor, 1515 Broadway, New York, NY 10036. Telephone 212-730-1050 or WU Telex 968082 SCHERAGO, or FAX 212-382-3725. **Subscription/Member Benefits Questions:** 202-326-6417. **Science:** 202-326-6500. **Other AAAS Programs:** 202-326-6400.

As I sit down to the momentous task of preparing my 1991 New Year's resolutions, it occurs to me that modern science has made obsolete many of the maxims by which sincere and conscientious people such as myself have guided our lives. Although scientists are expected to alter the technologies of nutrition, communication, locomotion, and the like, we assume that the homilies identified with personal rectitude and moral uplift will remain inviolate. Yet viewed against the advances in society, these homilies become testimonials to the rapidity of change.

"Don't count your chickens before they're hatched." The modern chicken will have been analyzed by ultrasound and amniocentesis, will have had its sex determined and its DNA sequenced. It will not only have been counted but discounted before it is hatched.

"It's not over until it's over." Of course, most things are over long before they're over. Elections, for example. The pollsters are now able to predict every aspect of campaigning, from the type of television commercial that will change voters' minds to how they will vote on election day. Sooner or later, we will save a great deal of money by simply eliminating elections.

"Speak softly and carry a big stick." The updated version of this old maxim would certainly be, "Speak into the microphone and carry an AK47." The congressional version is, "Speak loudly and notify everyone you won't use the stick."

"Neither a borrower nor a lender be." People who do not have plastic cards and mortgages, and who have not invested in some go-go get-rich-quick scheme, are certain to spend their lives paying taxes, sending their children to school, and fading into that unrecognized middle known as the backbone of America. In an up-front society, backbones never get mentioned.

"Beauty is in the eye of the beholder," can be modernized to, "I've never seen a billboard I didn't like."

"Eat, drink, and be merry, for tomorrow we die." It is of course important to keep eating and drinking, but no one can be merry about it, because we now know that food and drink are filled with carcinogens, teratogens, and fat. Since life expectancy keeps steadily going up, "tomorrow" is obviously interpreted as sometime between 114 and 116 years old. While you can plan on living longer, you should be extremely morose about it, and point out that the bubonic plague was trivial compared to the trials of those dying of Alar in apples and the red dye in maraschino cherries.

"Don't shoot until you see the whites of their eyes." In a world with launch-on-warning missiles and satellite snooping, by the time you see the whites of their eyes the fat lady is singing.

"*Plus ça change, plus c'est la même chose.*" That is generally regarded as a tranquilizer, which implies that technology changes but human nature remains invariant. But even that's no longer true. In an era of computers, DNA sequences, nuclear missiles, and population explosions, the relationships between human beings are changing. The follies of the past—prejudice, chauvinism, exploitation, complacency—have different faces in a crowded and technologically advanced world. Modern science is providing us with the knowledge about our environment and ourselves that may teach us to avoid those follies, but whether we are willing to use our new knowledge of human motivation is not clear. Sometimes that knowledge leads to politically unpopular conclusions, such as the urgent need to find alternatives to fossil fuels. Everyone is for fuel efficiency. No one is in favor of restrictions on building locations to make mass transportation economically feasible. Then the temptation is to give moralistic reasons for avoiding harsh reality. The "right to have a house where I want it" and the "right to drive to work" are great moral and conflicting policies. The good solution may be labeled "scientific," implying that the cold-blooded brain is at work, and the easy solution may be called "humane," implying that the caring and empathetic heart is making the decision. In the long run, however, facing scientific facts may be more humane than clinging to comforting anachronisms.

So perhaps there is at least one proverb that has not been changed by time: "Necessity is the mother of invention." Let us, therefore, guide ourselves in 1991 so that we can have the will to recognize the necessity and the resourcefulness to provide the inventions.

—DANIEL E. KOSHLAND, JR.