

# 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.

## Editorial Board

1972

ALFRED BROWN	FRANK PRESS
JAMES F. CROW	FRANK W. PUTNAM
THOMAS KUHN	WALTER O. ROBERTS
ELLIOTT W. MONTROLL	

1973

H. S. GUTOWSKY	GARDNER LINDZEY
ARTHUR D. HASLER	RAYMOND H. THOMPSON
RUDOLF KOMPFFNER	EDWARD O. WILSON
DANIEL E. KOSHLAND, JR.	

## Editorial Staff

### Editor

PHILIP H. ABELSON

### Publisher

WILLIAM BEVAN

### Business Manager

HANS NUSSBAUM

Managing Editor: ROBERT V. ORMES

Assistant Editors: ELLEN E. MURPHY, JOHN E. RINGLE

Assistant to the Editor: NANCY TEIMOURIAN

New and Comment: JOHN WALSH, DEBORAH SHAPLEY, ROBERT GILLETTE, NICHOLAS WADE, CONSTANCE HOLDEN, SCHERRAINE MACK

Research News: ALLEN L. HAMMOND, WILLIAM D. METZ

Book Reviews: SYLVIA EBERHART, KATHERINE LIVINGSTON, KATHRYN MOUTON

Cover Editor: GRAYCE FINGER

Editorial Assistants: MARGARET ALLEN, ISABELLA BOULDIN, BLAIR BURNS, ELEANORE BUTZ, RONNA CLINE, ANNETTE DIAMANTE, MARY DORFMAN, JUDITH GIVELBER, MARLENE GLASER, CORRINE HARRIS, OLIVER HEATWOLE, CHRISTINE KARLIK, MARSHALL KATHAN, MARGARET LLOYD, JANE MINOR, DANIEL RABOVSKY, PATRICIA ROWE, LEAH RYAN, LOIS SCHMITT, RICHARD SOMMER, YA LI SWIGART, ALICE THEILE

Membership Recruitment: LEONARD WRAY; Subscriptions: BETTE SEEMUND; Addressing: THOMAS BAZAN

## Advertising Staff

### Director

EARL J. SCHERAGO

### Production Manager

BONNIE SEMEL

Advertising Sales Manager: RICHARD L. CHARLES

Sales: NEW YORK, N.Y. 10036: Herbert L. Burklund, 11 W. 42 St. (212-PE-6-1858); SCOTCH PLAINS, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); MEDFIELD, MASS. 02052: Richard M. Ezequelle, 4 Rolling Lane (617-444-1439); CHICAGO, ILL. 60611: John P. Cahill, Room 2107, 919 N. Michigan Ave. (312-DE-7-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 111 N. La Cienega Blvd. (213-657-2772)

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Phones: (Area code 202) Central office: 467-4350; Book Reviews: 467-4367; Business Office: 467-4411; Circulation: 467-4417; Guide to Scientific Instruments: 467-4480; News and Comment: 467-4430; Reprints and Permissions: 467-4483; Research Topics: 467-4455; Reviewing: 467-4440. Cable: Advancesci, Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. See also page xv, *Science*, 24 September 1971. ADVERTISING CORRESPONDENCE: Room 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE-6-1858.

## Old Cities, New Cities, No Cities

As people congregate story-on-story and freeway-on-freeway the acidity of the human solution rises catastrophically. Nature is etched away bit by bit; soon cities become indelible scars on the face of the planet. Not only is nature destroyed in the heart of the modern city, but man's own wastes—smoke, garbage, sewage—threaten to asphyxiate and poison their maker.

This view of the city is the "apocalyptic" interpretation of modern urban trends. The future is not really so bleak. With imagination and a liberal dose of optimism, we can foresee our old cities remade in more human molds and new cities built with man in mind. The cities of the future could, *if men insist*, be the utopian centers of culture and inspiration we have read about ever since men began to write. Perhaps we would not care to dress for dinner every night or wear top hats perpetually as the city dwellers do in Bellamy's *Looking Backward*, but we do like to congregate with our kind. Given these social instincts, there is no technical reason why these places of congregation—the cities—cannot be stimulating, healthy, and aesthetically pleasing as well as economically sound investments.

What are the problems? The main problem is that 50 percent of the people in the United States live on 1 percent of the land. More move to the cities every day. It is already worse in some foreign countries. Rome's traffic is nearly impossible; Tokyo is a solid mass of humanity. The symptoms of overpopulation are air pollution, water pollution, high crime rates, short tempers, and encroaching ugliness, to name a few. As presently applied, technology leads to big garbage dumps, foul air, and cesspool-like lakes; but *it does not have to be this way*. Industrial wastes can be treated and smokeless fuels can be developed, to give just two examples. Technology can be turned easily to cleaning up the urban mess originally created partly through the misuse of technology and partly through gross underestimation of humanity's capacity to breed and consume, and to expel wastes. In fact, technology properly used may be the only short-term answer to the city's problems because it will take time to check population growth. More significant than old cities in the long run are the brand-new cities that are now possible, cities in which man and machine are no longer at each other's throats. Even the wastes of the city will one day become valuable lodes of minerals and chemical compounds.

Aspirin may relieve a headache and bring down a fever; technology can treat the symptoms of urban ills. The patient, however, is still sick in both cases. The disease is simply too many people in areas that are too small. Urban renewal cannot solve this problem; it is merely aspirin. Athelstan Spilhaus has said, "The overgrown urban complex must be selectively dismantled and dispersed if we are to cure the ills of the megalopolis."

Building brand new cities, the "minilopolis" instead of the megalopolis, is a good intermediate solution, possibly akin to substituting sulfa drugs for aspirin. The penicillin for urbanitis, the sure cure, though, is either population reduction or the complete elimination of the city. Why cannot people live wherever they wish and congregate electronically? Sight, sound, the sense of touch, and, in the near future, even the sense of smell, can be transmitted anywhere in the world. Many of the business and cultural advantages of the city can be re-created equally well in a study high in the Rocky Mountains or in an artist's studio out on Cape Cod. Thus, the title of this [editorial] spans the spectrum: from old cities refurbished to brand new cities to no cities at all.

Adapted from Glenn T. Seaborg and William R. Corliss, *Man and Atom* (Dutton, New York, 1971), pp. 144-146.