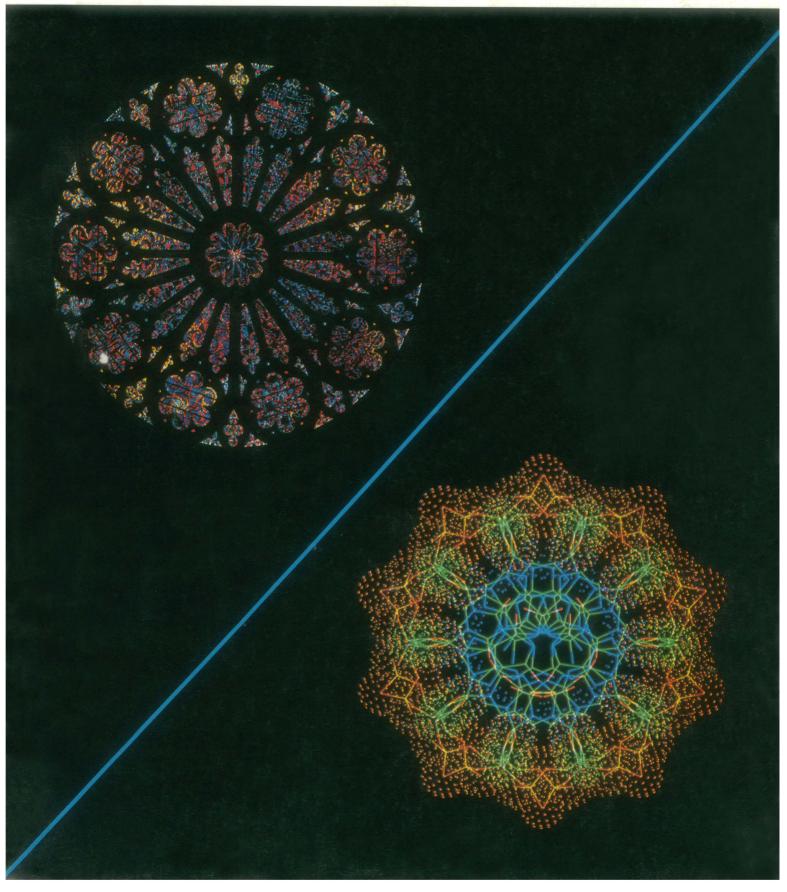
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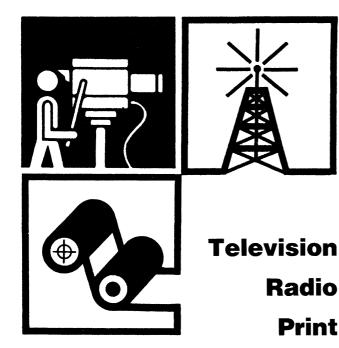
SCIENCE

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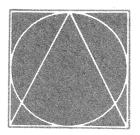
 Each entry must have been published or produced and broadcast within the United States during the contest year— 1 January 1983 through 31 December 1983. (In case of a series, more than half of the items comprising it must have been published or broadcast during the contest year.) The date on the issue in which an article appears will be considered as the date of be being all or an article appears will be considered as the date of the issue of the second publication. All entries must be postmarked on or before midnight, 15 January 1984. • Persons other than the author may submit entries in accord-

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Winners of the 1982 awards are not eligible for the 1983 awards. Persons winning three times are no longer eligible.

 awards. Persons winning three times are no longer eligible.
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• The awards will be presented at the dinner meeting of the National Association of Science Writers during the Annual Meet-ing of the American Association for the Advancement of Science in New York City in May 1984. Travel and hotel expenses of the award winners will be paid. Entrants agree that, if they win, they will be present to receive their awards, unless prevented by circumstances beyond their control.

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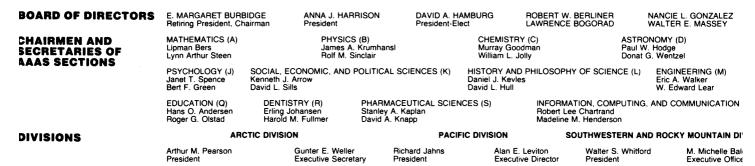
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M. Lowenstein	Coyt T. Wilson	Robert L. Stern	by Rowan Le Compte in 1977, depicts
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view of tenfold, B form DNA [R. Lan-gridge *et al.*, *J. Mol. Biol.* **2**, 38 (1960)] using a new, fast surface algorithm. See page 1325. [Computer Graphics Labo-ratory, University of California, San Francisco 94143]

SCIENCE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Science serves its readers as a forum for the presenta-tion 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 *Sci*ence-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

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A Run Worth Making

It has been said, perhaps too often and too loudly, that science is an objective process, one that is value-free. In our time, when science is being employed most conspicuously as an adjunct of politics and strategic national purposes, a vacuum of internal values tends to be invaded by prevailing external values. Not surprisingly, the eventual recognition of what is taking place produces a level of discomfort that expresses itself, within the strictures of science's methodologies, in concerted displays of scientific responsibility. The conscience of science comes, a step at a time, to life.

Despite admonitions from Rome that believing scientists have the duty to look themselves in the eye when they apply brainpower to weapons systems, scientists are justified in doing what is necessary to offset the unmistakable progress of an unpredictable adversary. But what must be added is that scientific responsibility has another dimension, and it is to look squarely at the consequences of violence in the application of scientific knowledge.

It has been a very good thing for the integrity of science, and a sign of courage, that some 40 scientists of high standing have gone public with their considered estimates of the global atmospheric effects and long-term biological consequences of nuclear war.* Whether such a weapons exchange would be small or vast in its scale, they believe, the effects on the biosphere would be lasting and literally deadly. In effect, life-support systems would be cut, and the diminished surviving populations would have little chance in a darkened and sunless environment.

Some four decades ago in the heat of war and its enforced secrecy, scientists prepared the nuclear weapons that were exploded without warning upon civilian populations. It says a good deal for the emergence of the scientific conscience that, in a difficult age of superpower hatreds and technological gusto, the present warning is timely, unvarnished, and stark. Nor is it the first of its kind. Health scientists have made clear the absurdity of assuming that there would be a medical care system after a major attack and have been stumping the country to put the message across.

There remains the question of who is listening and how deeply these warnings penetrate and adhere to the nation's thought. For a few days, the news of potential biological catastrophe is the stuff of media prominence, only to be quickly displaced by the next catastrophe. The society is exhausted and news-numbed. No special session of the U.N. General Assembly is called to digest and reflect on the appalling meanings of the scientists' findings. If alarms have shaken the American and Soviet tacticians ostensibly seeking a breakthrough in nuclear arms control negotiations, it is a well-kept secret. The drift continues, and the world is ablaze with "small" wars and threats of larger ones. What does this signal to concerned scientists? For all that is obvious about science as a universal force, as a trusted partner in the works of society and governments, can it be supposed that science cannot make a difference in the one matter that transcends all the others? This is not a conclusion that scientists will swallow.

Among the endless arguments centering on arms control agreements, no issue is more vexing than that of verifying compliance, especially as new weapons are promised to the arsenals of both sides. What the cluster of scientists concerned with biological effects have done very well is to nail down, as far as scientific method can do it, the probabilities of consequences of an exchange of nuclear weapons on the biosphere. Even allowing for the constraints imposed on scientific opinion in the Soviet Union, it is fair to assume that the same conclusions are held in that quarter. Here, then, is a new basis for dialogue and for an alternative run at restraint. It is a run worth making.-WILLIAM D. CAREY

^{*}R. P. Turco et al. and P. R. Ehrlich et al., this issue

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Information for Contributors

The Editors of Science

Papers published in Science often receive far more attention than papers published in specialty journals. As a consequence, the rate of submission of papers is high-about 5000 manuscripts are submitted each year. The rejection rate of about 80 percent contrasts with that of most specialty journals, which is usually about 30 percent. Most of the material submitted to Science is of good quality and worthy of publication, and virtually all the scientific papers are eventually published somewhere. In selecting papers for Science, the editors consider the needs of a broad audience. Preference is given to items that seem to be of general significance.

General Information

Five types of signed papers are considered: Articles, Research Articles, Reports, Letters, and Technical Comments. The author's membership in the AAAS is not a factor in selection. Material that has been published before is ineligible for publication. Papers are considered with the understanding that they have not been published and are not under consideration elsewhere. Authors will usually be notified of acceptance, rejection, or need for revision in 6 to 8 weeks (Research Articles and Reports) or 8 to 10 weeks (Articles).

Outside reviews. Most articles and reports are sent to two or more outside referees for evaluation. Some papers are returned promptly to the authors without an external review if they are unlikely to be chosen for publication. Referees are selected from *Science* files as well as from lists provided by authors. Papers that depend on statistical inference for their conclusions may be sent to statisticians (in addition to other referees) for review.

Length limits. Papers that exceed the length limits cannot be handled expeditiously and will usually be returned without review.

1) Articles: Up to 5000 words (approximately five printed pages in *Science*), including the references and notes *and* the figure and table legends. The

illustrations (figures and tables) when printed in *Science* should together occupy no more than one page.

2) Research Articles: From 2000 to 4000 words (3 to $3\frac{1}{2}$ printed pages in *Science*) including the references and notes *and* the figure and table legends. Illustrations (figures and tables) may together occupy up to one printed page.

3) Reports: Up to 2000 words (approximately $1\frac{1}{2}$ printed pages in *Science*), including the references and notes *and* the figure and table legends. The illustrations (figures and tables) when printed in *Science* should occupy no more than half a page.

4) Letters: Up to 250 words.

5) Technical Comments: Up to 500 words, including references and notes.

Selection of Manuscripts

1) Articles: About half the Articles published in Science are solicited by the editor. Both solicited and unsolicited Articles undergo outside and in-house review. Articles are expected to (i) provide a review of new developments in one field that will be of interest to readers in other fields, (ii) describe a current research problem or a technique of interdisciplinary significance, or (iii) present a study of some aspect of the history, logic, philosophy, or administration of science or a discussion of science and public affairs. Readers should be able to learn from a technical Article what has been firmly established and what are significant unresolved questions; speculation should be kept to a minimum. Preference is given to Articles that are well written, well organized, and within the length limit. Balance of subject matter in Science is an important consideration when a choice is made between acceptable Articles.

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in-house review. Reports are expected to contain solid research results or reliable theoretical calculations. Preference is given to those that describe departures or discoveries that will be of broad interdisciplinary interest or of unusual interest to the specialist. In making the final selection, the editors take into consideration (i) the reviewers' comments; reports most likely to be accepted are those that receive persuasive outside reviews favoring publication; (ii) clarity of presentation within the prescribed length limit; and (iii) subject matter in relation to that of other papers on hand. An attempt is made to balance the subjects of Reports so that one discipline is not overrepresented to the exclusion of others.

4) Letters: Letters are selected for their pertinence to material published in Science or because they discuss significant problems of interest to most scientists. Letters of a highly technical nature are usually transferred to the Technical Comments section. Letters pertaining to material published in Science may correct errors, provide support or agreement, offer different points of view, clarify, or add information. Outside reviewers may be consulted on questions of accuracy. Insinuations and conjecture about another author's motives, abilities, or intelligence are considered inappropriate for publication. The selection of letters is intended to reflect the range of opinions received.

5) Technical Comments: Technical Comments may be selected for publication if they express significant criticisms of papers published in *Science* or offer useful additional information. The authors of the original paper are usually asked for an opinion of the comments and are given an opportunity to reply if the comments are accepted for publication. Discussions of minor issues or priority claims are not deemed appropriate, nor are questions that can be resolved by correspondence between the critic and the original authors.

6) Book Reviews: The selection of books to be reviewed and of reviewers is made by the editors.

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2) the title of the paper and a statement of its main point;

3) the names, addresses, telephone

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Address the manuscript to the Editor, Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.

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5) Technical Comments: Technical Comments on Reports or Articles are published at the end of the Reports section. When a Technical Comment is accepted for publication the authors of the original paper are usually given an opportunity to reply.

6) Book Reviews: Instructions accompany review copies when they are sent to reviewers.

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Proofs. One set of galley proofs is provided for each paper. Alterations should be kept to a minimum and marked only on the proofs. Extensive alterations may delay publication.

Scheduling. Papers are not scheduled for publication until Science has received corrected galley proofs from the authors. The median delay between acceptance of papers and mailing of galley proofs to authors is 4 to 8 weeks (allowing for editing and typesetting); the median delay between receipt of authors' galley proofs by Science and publication is 4 to 6 weeks (allowing for proofreading, layout, and paging). There may be additional delays in publication for papers with tables or figures that present problems in layout and for papers accompanied by cover pictures.

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