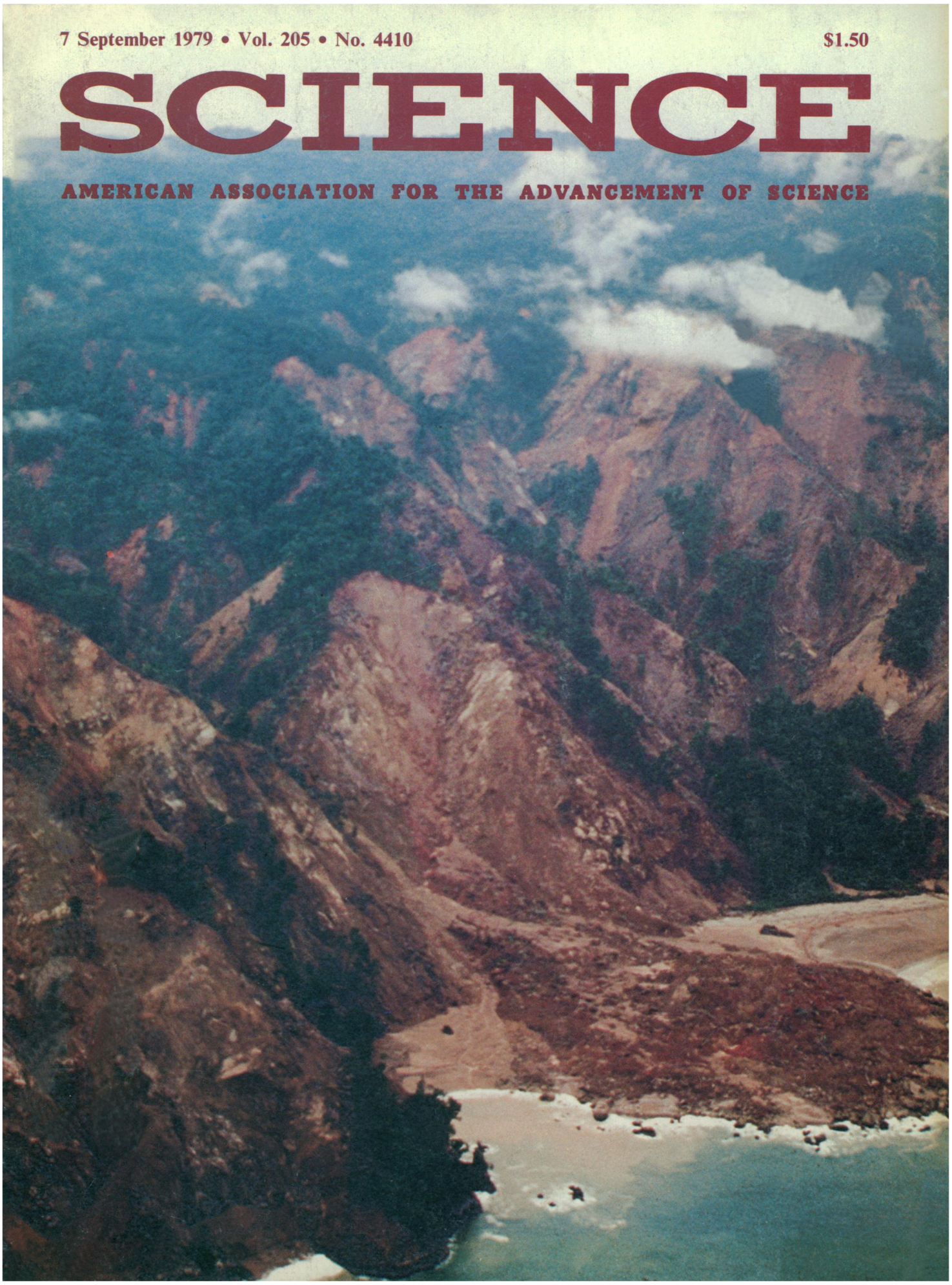
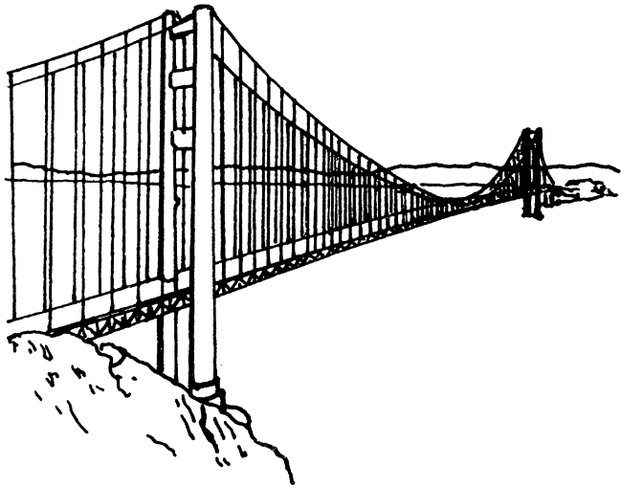
7 September 1979 • Vol. 205 • No. 4410 $1.50

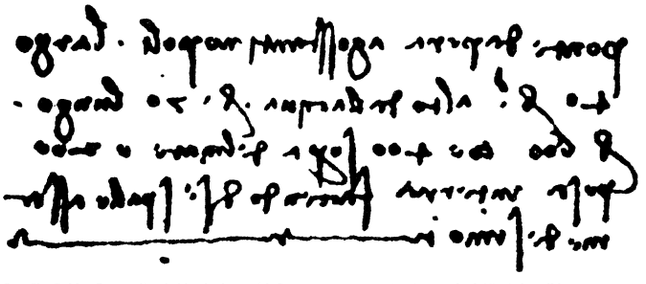
SCIENCE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



1979 AAAS/ Westinghouse Science Writing Awards





Top: The Golden Gate, tallest bridge in the world. Bottom: an excerpt by Leonardo daVinci describing a proposed bridge which would have been the world's largest at the time.

RULES

1) The aim of this competition is to encourage and recognize outstanding writing on the sciences and their engineering and technological application in newspapers and general circulation magazines. The following categories are not eligible: articles on the field of medicine, articles published originally in AAAS publications, articles by employees of the AAAS or Westinghouse Electric Corporation.

2) Each entrant in a newspaper award competition and each entrant in the magazine award competition may submit three entries.

3) An entry for a newspaper competition may be any of the following: a single story; a series of articles; or a group of three unrelated stories, articles, editorials, or columns published during the contest year. A magazine entry may be a single story or series published during the contest year.

4) A completed entry blank must be submitted together with six copies of each entry in the form of tear sheets, clippings, reprints, or syndicate copy (not over 8½" x 11"), showing name and date of the publication. ENTRIES MUST NOT BE ELABORATE.

5) Each entry must have been published in a newspaper or general circulation magazine within the United States during the contest year — 1 October 1978 through 30 September 1979. (In the case of a series, more than half of the articles comprising it must have been published during the contest year.) Date on the issue in which an article appeared will be considered as the date of publication. All entries must be postmarked on or before midnight, 15 October 1979.

6) Persons other than the author may submit entries in accordance with these rules. Entries will not be returned.

7) Winners of the 1978 awards are not eligible for the 1979 awards. Persons winning three times are no longer eligible.

8) The Judging Committee, whose decisions are final, will choose the winners. There are three awards of $1000: for the winning entry in the over-100,000 daily circulation newspapers competition, for the winning entry in the under 100,000 circulation newspapers competition; and for the winning entry in the general circulation magazine competition. For award purposes, newspaper circulation will be sworn ABC daily circulation as of 30 September 1979. The Judging Committee may cite other entries for honorable mention.

9) The awards will be presented at the dinner meeting of the National Association of Science Writers, during the 1980 meeting of the American Association for the Advancement of Science in January, 1980. 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.

Grayce A. Finger

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

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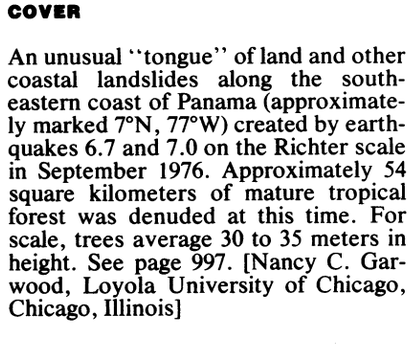
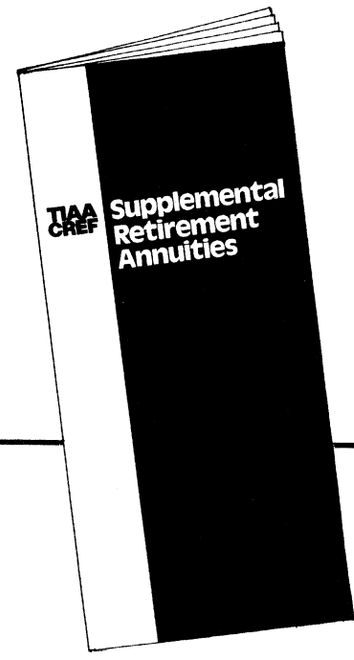
REPORTS

COVER



An unusual "tongue" of land and other coastal landslides along the southeastern coast of Panama (approximately marked 7°N, 77°W) created by earthquakes 6.7 and 7.0 on the Richter scale in September 1976. Approximately 54 square kilometers of mature tropical forest was denuded at this time. For scale, trees average 30 to 35 meters in height. See page 997. [Nancy C. Garwood, Loyola University of Chicago, Chicago, Illinois]

TIAA-CREF Supplemental Retirement Annuities



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7 September 1979, Volume 205, Number 4410 **SCIENCE**

College Mission Statements

Committees and commissions are at work everywhere on declarations of goals and statements of purpose for colleges and universities. Campus groups with different names are pondering the same questions: What is our mission? Who are our clients? Where are we headed? We are on the verge of mission madness. Mission statements are not so much valueless as overvalued. We make too much of the process and the product. Why?

First, governing boards are keen on mission statements. As the traditional guardians of the college's mission, trustees naturally worry about the state of the statement. Most board members can recite the college's mission for the next 5 years. Unfortunately, only a handful can suggest whether the goals set 5 years earlier have now been achieved. No matter; the college has an up-to-date mission statement.

Second, presidents are keen on mission statements. No one accepts a presidency to maintain the status quo. Presidents intend to be leaders, change agents. And what better way to initiate change than to reexamine the college's mission. Thus, almost as a ritualistic sequel to investiture, the new president convenes a committee to rethink the university's future.

Third, regional accrediting associations are keen on mission statements. To gain or maintain accreditation, a college needs a mission statement. No statement means no accreditation, and no accreditation means no future.

Of course the statements remain sufficiently global and rhetorical to accommodate the widest range of current and conceivable activities. No matter; accreditors have a yardstick to assess the college.

Trustees, presidents, and accreditors are likely to exaggerate the importance of mission statements; an enrollment problem guarantees excessive concern. As enrollments start to dwindle, an institutional identity crisis ensues. The campus community frets until suddenly everyone recognizes the obvious: we need a new mission statement. Inevitably, the notion of a new, clearer, and singular statement gathers momentum and assumes a quality larger than life, almost as if its very appearance will solve all problems. When the document finally returns from the printer, everyone feels greatly relieved. A mission in print is a mission in fact. The crisis has passed.

In *Leadership and Ambiguity*, Michael Cohen and James March offer an alternative to the mission statement. They propose that universities infer goals from actions. Actions can inform goals as easily as goals can inform action. In other words, we might ask what deeds (or outcomes) suggest about words and what actions (or decisions) suggest about aspirations.

No campus constituency should worry a great deal about an ordinary mission statement. Nor should a college feel compelled, even as the student market weakens, to fabricate significant differences in mission where none exist. Secret formulas and special ingredients should be left to the manufacturers of aspirin and soap powders.

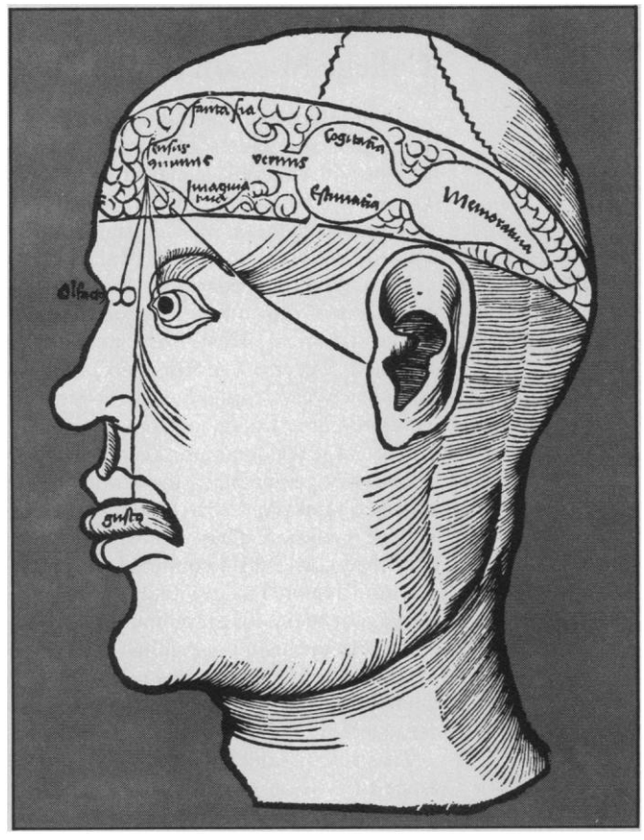
Distinctiveness is a quality far more important than uniqueness, and a college need not be different to be distinctive, only better. Distinctiveness derives more from execution than from mission, more from what a college does and less from what it purports to be.

In the final analysis, the mission will always be, in some sense, survival. Missions will be adapted to the market to ensure the organization's continuation. But I am less troubled by responsiveness to the marketplace than by the linguistic and philosophical gymnastics undertaken to merge the "new thrust" with the old mission.

The best way to survive, even flourish, may be to worry a little less about mission statements and a little more about actions. Of course the two are related, but we have overworked the former, perhaps because it is not as easy to attend to the latter.—RICHARD CHAIT, *Institute for Educational Management, Harvard University, Cambridge, Massachusetts 02138*

Adapted from the article "Mission Madness Strikes Our Colleges," which appeared in the 16 July 1979 issue of the *Chronicle of Higher Education*.

THE BRAIN is the single topic of the September issue of SCIENTIFIC AMERICAN



Is the brain a computer? What is the role of chemistry in brain function? Is the capacity of speech "hard-wired" into the brain? Where in the brain is the mind?

These are questions that will engage your interest in the September issue of SCIENTIFIC AMERICAN.

This issue does not, by any means, tell you "how the brain works." That remains one of the most alluring and baffling questions on the frontier of understanding. The convergence of work in many disciplines—from neurosurgery to linguistics—has begun to put that question, however, in ways that can yield answers.

The deep new knowledge about the brain, gathered at an accelerating rate in recent years, shows this organ to be marvelously designed and capacitated beyond the wonders with which it was invested by ignorant imagination.

Here are the articles:

- The Brain (Introduction)
- The Neuron
- Small Systems of Neurons
- The Organization of the Brain
- The Development of the Brain
- The Chemistry of the Brain
- Brain Mechanisms of Vision
- Brain Mechanisms of Movement
- Specializations of the Human Brain
- Disorders of the Human Brain
- Thinking about the Brain

Each of the authors of this issue has made significant contribution to the growing body of knowledge about the brain. Together they offer a comprehensive exposition of present understanding and chart the way for continuing study.

With this issue the editors of SCIENTIFIC AMERICAN continue a 30-year tradition of devoting each September issue to a single topic of current scientific and public interest. In the other monthly issues our readers enjoy a diversity of articles covering the full range of disciplines.

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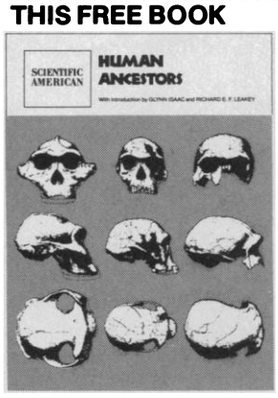

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