

mental studies headed by Richard A. Cooley, a visiting professor of geography currently on leave from the University of Washington. In developing this program Cooley has had strong support from the chancellor and executive vice chancellor.

These officials are clearly sympathetic to faculty and student efforts to pioneer in new life styles and value systems, and are not noticeably put off even when those efforts take an odd turn. A once barren 4-acre hillside has been brought into bloom by some 20 students working faithfully under Alan Chadwick, an Englishman whom they regard as the repository of an immense store of classical organic gardening lore. Chadwick believes in planting by the right phase of the moon and he abhors use of artificial fertilizers. To many on campus Chadwick is a mystic, and one biologist even describes him as a "menace to the plant physiology program."

Kenneth V. Thimann, provost of one of the colleges, once tried, delicately and indirectly, to suggest to Chadwick that some science belongs in the Garden Project. This missionary effort was not successful, however, and probably could

not have been. While escorting a visitor through the garden recently, a student leader of the project mentioned Thimann darkly as the researcher who did the basic science that made possible the defoliant 2,4-D.

"A lot of the Garden Project stuff is nonsense," Chancellor McHenry says, "but there is no harm in planting potatoes by the dark of the moon or in having a witch with a forked stick show you where to dig a well. The project brings an aspect to campus life that is very healthful." McHenry has approved a student application for a \$60,000 National Science Foundation grant needed to start a 26-acre model farm.

At the moment, all is in flux at Santa Cruz, with a new college expected to be opened every year except one between now and 1980, when the enrollment will reach 10,000. One of the basic questions that must ultimately be decided is how large shall UCSC be allowed to grow. Everyone here seems to agree that its growth should be stopped far short of the 27,500 enrollment figure projected in the UC master plan. McHenry would prefer an enrollment of between 10,000 and 15,000, with Ph.D. programs—there are now

ten and another five will be added—remaining relatively small. (Significant, if modest, research programs have been launched in biology, chemistry, and other fields and the graduate enrollment is increasing; by 1975, graduate students will make up 18 percent of the student body, as compared with 7 percent today.)

The radically new and superior kind of institution envisioned at Santa Cruz has not yet become a reality, but the vision has not receded. Many professors have come here in voluntary exile from the higher education Establishment, and few have left. Vice Chancellor McConnell, formerly of Berkeley and the University of Chicago, describes Santa Cruz as the "most exciting and hopeful place" on the academic map. He speaks extravagantly, but he speaks for many of his colleagues as well as for himself.—LUTHER J. CARTER

Luther J. Carter, a member of the Science news staff since 1965, is taking leave to write a book on the general theme of the effects of development on the environment in Florida. He will be based at Resources for the Future in Washington, D.C.

U.K. Science Press: New Scientist Absorbs Sibling Science Journal

London. The merger between *Science Journal* and *New Scientist*, two of Britain's most widely circulated science publications, has aroused questions about the social, as against the commercial, value of magazine publishing.

Both *Science Journal*, a glossy, well-produced monthly with some of the attributes of *Scientific American*, and the profitable weekly *New Scientist* are published by the International Publishing Corporation (IPC), the biggest British printing and publishing combine, whose cornerstone is the mass circulation tabloid *Mirror*. The IPC plans call for *New Scientist* to absorb *Science Journal* and, IPC hopes, its circulation. The January issue of *Science Journal* is its last, and the first issue of the combined magazine is scheduled for 21 January.

Science Journal was not hustled off to its end without unusually fierce protestations. For one thing, the British journalist, everywhere in Fleet Street and its environs, is ceasing to think of himself as a white-collar Bohemian, too respectable to take collective action, and too much in love with his art to resist exploitation; for another, there is deep suspicion of IPC's dominant position in the market, and its effects on the socially desirable but highly vulnerable business of magazine publishing. *Science Journal*'s staff succeeded in holding up the merger for 6 weeks, first by inspiring an offer of £80,000 from Britain's *Financial Times* group for *Science Journal*, which IPC eventually refused, and second by giving notice, under their trade-union house agreement with the management, of a dis-

pute. The staff on 35 of IPC's business magazines in the same building also struck for a day in protest against the merger and the abrupt way it had been announced. The Magazine and Book Branch of the National Union of Journalists demanded "immediate steps to persuade the government to conduct an appropriate public inquiry into the dangerous monopoly situation at IPC." They refused, they said, to go on accepting the high social cost of the closing and merging of magazines.

None of this, of course, saved *Science Journal*; and Britain, say the supporters of this magazine, is now left without a monthly general science magazine. What particularly offended them was the refusal of IPC to sell to the *Financial Times* group. A rather more tentative bid had also been made by Macmillan. As one of the supporters said, "£80,000 was a very good offer for a magazine that wasn't supposed to be a success." The chairman of IPC Magazines, Edward Pickering, said in the *London Times* that the refusal was motivated by the fact that "we were convinced that our plans for merging the two journals not only provided continuing employment for the staff con-

NEWS IN BRIEF

● **MEDICAL INSTITUTE ESTABLISHED:** An Institute of Medicine within the National Academy of Sciences (NAS) has been formally activated with the appointment of Robert J. Glaser, vice president of the Commonwealth Fund in New York City, as its acting president. The Institute, successor to the NAS Board of Medicine, will conduct study programs relating to the delivery of health care and to medical education and research. Charter membership presently totals 29, and is expected to reach 100 by the end of the year. The number of voting members will be limited to 400, at least one-fourth of whom will be drawn from other branches of science, law, government service, and administration.

● **NOTES FROM SOUTH OF THE BORDER:** No volcano can erupt unrecorded if a AAAS member is in the vicinity. Franklin Marsh, a technical writer at the Goddard Space Flight Center, interrupted a vacation in Mexico to telephone *Science*, at his own expense, an account of renewed activity in the ancient Mexican volcanoes of Popocateptl and Ixtaccihuatl. The events, observed from the village of Jantatelco de Matamoros, featured a 1000-foot long fan of lava and giant eruptions of steam. A local businessman who owns a private astronomical observatory told Marsh this was Popocateptl's first major outburst since 1920.

● **SMITHSONIAN APPRAISED:** A House subcommittee has released a report on the management and policies of the Smithsonian Institution following hearings last summer in which some of its financial procedures were called into question (see *Science*, 4 September 1970). While no mishandling of funds was found, some procedures were criticized—notably those involved in the acceptance of a gift of money and paintings from Joseph H. Hirschhorn for a museum and sculpture garden. The subcommittee also noted "weaknesses" in the institution's financial management and asked that it be more explicit and public in its accounting for income from private sources. The hearings, the first since 1885, were called after the General Accounting Office questioned some of the institution's policies and practices. The report may be obtained from the Committee on House Administration.

cerned, but would enable us to continue to discharge our responsibilities to the scientific community."

Archie Kay, of IPC's Special Interest Group, as quoted in the U.K. *Press Gazette*, was more blunt. "We would have been very unhappy to see *Science Journal* go into another company because together the two papers will have enormous strength in the scientific world which otherwise would have been lost to us. We wanted to protect our position, and secondly to see that what results is an even stronger scientific journal."

The IPC publishes scores of magazines. *Science Journal*, a well-designed monthly that used color and printed review articles of 4000 to 5000 words, was published by IPC's Business Publications Division, which puts out journals as disparate as *Melody Maker*, *Goal*, *Ultrasonics*, *The Scottish Licensed Trade News*, and *Cage and Aviary Birds*. *New Scientist*, a more spartan weekly science news magazine, with no color, much shorter articles, and paper just good enough to hold up the print, comes out of IPC's Magazine Division, and counts among its stablemates *Petticoat*, *Rave*, *Bobo Bunny*, *Home Sewing and Knitting*, *Amateur Gardening*, and a host of other publications for both sexes, all ages, and most interests—trivial, professional, and arcane.

It is easy to mock IPC, and considering the range and occasional overlapping of its publications, it is a wonder that such a behemoth stays in business at all. But nobody loves a business giant. An indignant scientist denounced the *Science Journal* merger in a letter to the *London Times* as "commercialism run riot." To this Pickering replied: "In the present cost-inflation situation it has become increasingly difficult for many publications, particularly those serving specialist needs, to maintain their services and standards without loss." *Science Journal*, he said, had lost £250,000 in 5 years. "In the face of escalating costs of production, salaries, and postal rates on the one hand, and declining revenue from advertising on the other, the publishers were confronted with accelerating losses in addition to those they have suffered over the past 5 years."

Science Journal, founded in 1965, undoubtedly lost money as long as it lived, although it had built up a circulation of about 50,000, half of which was overseas, particularly in Canada, the United States, Australia, and New

Zealand. Only a tenth of its advertising, however, was from overseas. The IPC naturally hopes that a good proportion of the advertisers, and the overseas readers, will transfer their allegiance to an enlarged and more comprehensive *New Scientist*.

The editor of *Science Journal*, Robin Clarke, a Cambridge science graduate, aged 33, says that the economic squeeze of the last 3 years has cut the total volume of corporate advertising, but that the proportion of corporate advertising taken by *Science Journal* had not gone down: in other words, it had had a bigger share of a declining market. He blames the magazine's troubles on neglect of management and says that by managing it himself after August 1970, he made it show a profit. Printing costs, he says, went up by 18½ percent between July and October 1970; and, although he admits that magazines like *Science Journal* are marginal enterprises and always liable to fall under the axe, he thinks it could have survived, had proper use been made of its resources.

"A magazine like *Science Journal*," he says, "should be considered as one unit in a group, which relies on pooled expertise, and is also busy producing other magazines, books, film strips, and wall charts. That's where the growth is, if someone grabs it."

Colin Shepherd, who will be responsible for publishing the enlarged *New Scientist*—which IPC claims will, with the addition of *Science Journal*'s resources, be "the most important weekly magazine serving science, technology, and industry on an international scale"—says that monthlies like *Science Journal* are always vulnerable. A weekly may need a staff twice as large as a monthly, but it produces 52 issues as against 12; and a monthly, which needs that shiny, permanent look, is relatively more expensive to produce. And, of course, monthlies cannot carry very effective classified advertising.

Classified advertising! This is the prosaic slogan that lifts the hearts of IPC men as the cold economic winds bluster about them. *New Scientist*, and its sociological stablemate, *New Society*, have always been weekly news magazines without prestige advertising, but they have made their fortune out of closely packed and lucrative small advertisements aimed at their special readership.

New Scientist was launched in 1956 as a magazine of science for the non-scientist: "At the time," says the editor,

Dr. Bernard Dixon, "of the first Sputnik—a time when it was enough to catalog what scientists were doing, and everyone applauded." The original formula did not prosper. Circulation picked up only when scientists began to read the magazine for information about events outside their immediate fields. Then, according to Dixon, its chief function became cross-fertilization: biologists reading it to find out what solid-state physicists were doing, and so on. Such people read the "Help Wanted" columns, and thus *New Scientist* struck gold. It is now believed that *New Scientist* has a readership six or seven times its circulation of about 49,000.

Dixon, a microbiologist, aged 31, says that there is no room for a magazine that caters only to nonscientists. "Since *New Scientist* began, there's been a great increase in the coverage of science on radio and TV and in the press. People are better informed and they have more sources of information. So now we assume a general familiarity with scientific concepts but keep the nonscientists in mind." Probably only 4000 or 5000 copies are bought by nonscientists. Dixon tries to mingle news and authoritative articles, although the blend is not easy to achieve. "I don't expect every reader to understand everything in it. This doesn't apply to a financial column in, say, a literary paper, so why should it apply to us? Some things would simply be spoiled by being translated into the language of the layman—though if a subject's significance is wide enough, it must be spelled out."

Hitherto *New Scientist* has dealt largely with British affairs, and only a quarter of its sales have been abroad. It is not nearly so well known as it would like to be, for example, in the United States. It has little hope of a big increase in home sales, although circulation there is rising slowly, and it is abroad that its future ambitions lie. "Basically," says Dixon, "we plan to make the paper bigger and better with more pages, and editorial four-color pictures inside. It won't go to the length of the review articles in *Science Journal*, but there'll be more space for articles of about 2500 words, and international news will be extended."

No one yet knows, of course, whether overseas readers of *Science Journal* will stay with the enlarged *New Scientist*. Somewhere there is a vast graveyard of readers of merged periodicals who simply went away and died of loss—or so ultimate circulation figures

U.C. Faculty Asks New AEC Contract

University of California faculty have voted to recommend to the regents that the university continue to operate the Livermore and Los Alamos laboratories, which are devoted largely to nuclear weapons development, but they favored modification of the terms of its contract with the Atomic Energy Commission (AEC). The faculty vote amounts to an endorsement of majority opinion expressed in a report by a faculty study committee (*Science*, 3 July 1970). The committee asked that the contract, which expires in September 1972, be changed to give the university greater administrative control over the labs, to enable it to participate more effectively in policy decisions, and to increase the educational benefits gained from association with the laboratories, where much work is classified.

The vote in favor of renewal of the contract was 2279 to 1712, and the vote for modification of the contract terms was 2809 to 984. Some 7201 members of the faculty on nine campuses were eligible to vote. Reporting of the faculty vote to the regents constitutes an expression of views which have no formal weight. The regents, which meet next on 22 January, have responsibility for decisions on the AEC contract.

—J.W.

often suggest. But Colin Shepherd hopes that an international sale as large as that of *The Economist* will be enough to win *New Scientist* advertising from international business. Though *The Economist's* overseas sales are only about 25,000, it sells to the right kind of people and carries prestige advertising from the United States, Japan, and Europe. *New Scientist* already has a sale of 10,000 overseas, and Shepherd reckons that another 25 percent will be enough to appeal to more and richer advertisers. At any rate, the print order for the new magazine will be 100,000: about the same as the combined circulations of *Science Journal* and *New Scientist*.

Meanwhile, *New Scientist's* companion, *New Society*, is happy enough in domestic pastures. Its field is social science and social problems, and, at present, it is selling about 37,000 copies a week, 90 percent of them in the United Kingdom. Not much is done to promote overseas sales. *New Society* began 8 years ago, quickly acquired great fundamental strength in the development of classified advertising appealing to social workers and academic sociologists, and has prospered since then as the general interest in sociology has increased. Sociology is the most popular subject at British universities at present, and *New Society* finds itself able to appeal to a much wider readership than that provided by sociologists and people in the social services.

This leaves, in the IPC's stable, the

Geographical Magazine, something of a survival from an older tradition of journalism. It has been running for about 35 years, with several changes of style, but has always catered not only to professional geographers and other academics, but to nonprofessional readers as well. Its editor, Derek Weber, insists on its professional and geographical character, and half its shares are owned by the Royal Geographical Society. It is a handsome product nowadays, with color and special numbers on subjects such as cartography, climate, and weather. But when the magazine was founded geography was a simpler study, and it was one of many magazines appealing to the casual pursuit of self-education: a middle-brow market which the spread of higher education has greatly diminished.

Nevertheless, IPC is selling it hard to schools and universities and looks to a time when no English-speaking institution teaching geography will be without a copy. It does not make a profit, although it sells about 70,000 copies per issue and is thought to have more than a million readers all over the world; it has also been through its own comedy of mergers, having absorbed some years ago an adventure story magazine called *Wide World*.

Alone outside the IPC camp, *Nature* surveys the scuffles inside with lofty distaste. *Nature* was founded more than 100 years ago, and its development reflects, in a leisurely way, the development of other scientific publications

since: from the general and informal, suitable to amateurs and nonscientists, to the highly technical, approachable only by professionals. The editor, John Maddox, has attempted to reverse this trend to some extent. Once a lecturer in theoretical physics at Manchester University, he came into journalism by way of the old Manchester *Guardian* and has all the lay professional journalist's qualities to a high degree. Today *Nature* opens with several pages of news and weighty comment on international scientific affairs.

Though *Nature* continues to publish scientific papers that intimidate the inquiring layman, Maddox says that he wants the magazine, above all, to be a good read, and regards the news and comment and the scientific papers as equally important. The present circulation has risen from about 13,000 to 18,500 since he began the new policy. Nearly 6000 copies sell weekly in the United States and about 1000 in Japan. Britain itself accounts for only about 2500. The readers are professional scientists everywhere, mostly at universities; and although they may not seem many, *Nature* makes a profit because, at \$48, it has charged a relatively economic price.

Nature's latest venture is publication three times a week, the idea being to separate specialized and less specialized content, and spare people what they do not wish to read, while giving them a complete survey of what is going on. Consequently, on Mondays, *Nature: Physical Sciences* is issued; on Wednesdays *Nature: New Biology*; and on Fridays a magazine much like the present one, together with a digest of Monday's and Wednesday's content is issued. (The subscription price for the Friday *Nature* remains the same. The addition of the Monday or Wednesday issue raises the cost to \$83 and for all three the annual rate is \$108.)

With one eye, perhaps, on IPC's convulsions, Maddox is at pains to point out that *Nature* is not to be considered a financial operation; but, nevertheless, he thinks that the new venture will show a profit.

As for the case with *Science Journal*, judgment in such a conflict of social and commercial values depends on one's point of view. The case against IPC is that it killed a good magazine because it was not showing a profit, and would not let it go to another group which might make it into a rival. The case for IPC is, at best, that it was reinforcing a stronger position while

abandoning a weaker one—an entirely legitimate means of defense—and, at worst, that giants who occasionally feel weak in the legs are entitled to stop themselves from falling over by any means at their command.

—MICHAEL BUTLER

Michael Butler, a former member of the staff of the Manchester Guardian, is now a producer for the B.B.C. external service.

APPOINTMENTS

John C. Weaver, president, University of Missouri, to president, University of Wisconsin. . . . **Harris W. Dean**, vice president for academic affairs, University of South Florida, to president of the university. . . . **Donald D. O'Dowd**, chancellor, Oakland University, to president of the university. . . . **Elliott T. Bowers**, vice president for university affairs, Sam Houston State University, to president of the university. . . . **Kenneth E. Lindner**, director of letters and science academic program planning, Wisconsin State University system office, to president, Wisconsin State University, La Crosse. . . . **B. D. Owens**, vice president for research and financial affairs, Bowling Green State University, to president, University of Tampa. . . . **James E. Allen, Jr.**, former U.S. Commissioner of Education, to director of the new program in education and public affairs, Princeton University. . . . **Ruth M. Davis**, director, Lister Hill National Center for Biomedical Communications, National Library of Medicine, to director, center for computer sciences and technology, National Bureau of Standards. . . . **Max E. Britton**, director, Arctic Research Program, Office of Naval Research, to director, Arctic Development and Environment Program, the Arctic Institute of North America. . . . **John L. Nickerson**, acting dean, School of Graduate and Post-Doctoral Studies, Chicago Medical School/University of Health Sciences, to dean of the school. . . . **L. Edward Lashman, Jr.**, former assistant to the secretary, Department of Housing and Urban Development, to vice president for development, University of Massachusetts. . . . **Gerald P. Murphy**, associate director for clinical affairs, Roswell Park Memorial Institute, to director of the institute. . . . **Willie Carter**, chairman, civil engineering department, Tennessee State Uni-

versity, to dean, School of Engineering. . . . **William H. Luginbuhl**, associate dean, College of Medicine, University of Vermont, to dean of health sciences and the college. . . . **Everett F. Cataldo**, associate professor of political science, Cleveland State University, to director, Institute of Behavioral Research, Florida Atlantic University. . . . **Jan Rocek**, professor of chemistry, University of Illinois, Chicago Circle, to dean, Graduate School. . . . **David S. Sparks**, associate dean for humanities and social sciences, University of Maryland, to dean for graduate studies and research at the university. . . . **Rene J. Dubos**, professor of pathology and microbiology, Rockefeller University, to chairman, environmental studies department, State University of New York, Purchase. . . . **Robert Rogalski**, chairman, sociology department, Lewis-St. Francis College, to chairman, sociology department, St. Procopius College. . . . **Edwin Hammond**, professor of geography, Syracuse University, to chairman, geography department, University of Tennessee, Knoxville. . . . **Frank C. DeSua**, professor of mathematics, Simmons College, to chairman, mathematics department, Sweet Briar College.

RECENT DEATHS

J. Hamilton Crawford, 76; director emeritus, department of medicine, Long Island College Hospital, and professor emeritus, department of medicine, Downstate Medical Center, State University of New York; 14 December.

Frederic Feichtinger, 70; associate professor of clinical psychiatry, Downstate Medical Center, State University of New York; 13 December.

Thomas N. Graham, 69; retired assistant clinical professor of dermatology, New York University; 1 December.

Benjamin Harrow, 82; professor emeritus of chemistry, City College, City University of New York; 8 December.

Newton S. Herod, 82; former professor of physics, Georgia Institute of Technology; 23 November.

Yale Kneeland, Jr., 69; professor emeritus of medicine, College of Physicians and Surgeons, Columbia University; 15 December.

Eduardo Weiss, 81; former visiting professor of psychiatry, Marquette University; 14 December.