

Headline Science

"Perky Cheerleaders" by John Crewdson, in *Nieman Reports* (Winter 1993), Nieman Foundation, Harvard Univ., One Francis Ave., Cambridge, Mass. 02138.

In 1989 the Philadelphia-based Wistar Institute reported in *Science* magazine that multiple sclerosis might be caused by an AIDS-like virus. News media across the country picked up the story. Neither the *Science* report nor the news stories it inspired mentioned that essentially the same "finding" had been announced four years earlier in the British journal *Nature*, and that other laboratories had swiftly thrown cold water on it (just as was to happen with the recycled *Science* finding). When Wistar a few years later announced that it had linked chronic fatigue syndrome to an AIDS-like virus, once again its "breakthrough" was widely reported—and the subsequent debunking of it by the Centers for Disease Control was widely ignored. The public is ill served by such superficial reporting, says Crewdson, a senior writer for the *Chicago Tribune*. He contends that science writers all too frequently serve as mindless cheerleaders for the scientists they cover.

Like other journalists, science writers generally prefer stories that are simple and dramatic. Because scientific subjects are so often extremely complicated and technical, science writers are more dependent than other reporters on the people they cover to tell them what the story is. Some researchers are only too happy to give them a "story." In addition, Crewdson writes, "Science writers may be the last innocents. Among journalists they are certainly the last optimists." When a scientist says that he has discovered something big, the science writers usually are eager to believe him.

In the brave new world of Big Science, researchers are highly dependent on favorable publicity, Crewdson observes, and some have become shrewd manipulators of the Fourth Estate. "Whether it comes from the federal treasury

or a private foundation, next year's money depends on this year's discoveries." When there are no important discoveries, "non-discoveries and marginal discoveries and problematic discoveries are spiffed up and published in journals like *Science* and *Nature*, which [distribute] them to the mass media as energetically as any big-city tabloids competing for circulation."

7,000 Scientists Cheer Fusion-in-Jar Experiment

By MALCOLM W. BROWNE
Special to The New York Times

DALLAS, April 12—A Utah scientist received sustained applause from 7,000 chemists today as he described an experiment that he said had produced nuclear fusion in a simple electrolytic cell. But while most of the scientists attending the national meeting of the American Chemical Society here appeared to accept the interpretation of the results given by the scientist, Dr. B. Stanley Pons, the few physicists expert in fusion who attended the meeting appeared to be skeptical. It appeared, in fact, that the fusion experiment, carried out at the University of Utah and announced March 23, has opened a schism between chemists and physicists that may take years of experimentation to resolve. Nuclear fusion is ordinarily studied by physicists, who deal with changes that occur nuclei of atoms. Chemists inv

the electronic interactions of entire atoms and molecules. Dr. Pons and his collaborator, Dr. Martin Fleischmann, an electrochemist at the University of Southampton in England, startled scientists with their initial public report, which was made at a news conference at the University of Utah, where Dr. Pons heads the chemistry department. They said they had obtained a large excess of energy from a simple electrolytic cell, in which an electrical current passed through heavy water (water in which hydrogen is replaced by its heavy isotope, deuterium) set off hydrogen fusion in a palladium cathode.

Unlike fission, in which atoms are split to release energy, fusion is the joining together of the nuclei of hydrogen atoms to produce helium and enormous amounts of energy. Fusion normally occurs only at temperatures exceeding those

form of hydrogen fusion as a commercial source of power, some scientists believe that energy shortages that seem likely to occur in the next few centuries could be forestalled.

The symposium today at the American Chemical Society was unprecedented, both in size and in the haste in which it was prepared, according to Dr. Clayton F. Callis, president of the organization.

Long applause followed Dr. Callis' expression of satisfaction that chemists rather than scientists from other disciplines were getting credit for what might be a monumental discovery.

But one of the five panelists in the discussion, Dr. Harold Kroger, a physicist at the meeting, said that physicists expert in fusion would accept Dr. Pons' experiment.

Reported scientific breakthroughs don't always live up to their billing.

Eager for stories, the science writers go along. In the Wistar case, Crewdson says, not only was the institute's history of dubious discoveries ignored, but reporters "failed to notice that the institute's increasingly desperate publicity grabs paralleled both its worsening financial straits and the . . . struggle of its septuagenarian director to keep his job."

The old view of scientists as disinterested, almost godlike creatures simply won't stand up, Crewdson says. Science writers need to learn a basic journalistic lesson: "If your mother says she loves you, check it out."

Technological Retreat

"Suppressing Innovation: Bell Laboratories and Magnetic Recording" by Mark Clark, in *Technology and Culture* (July 1993), Univ. of Chicago Press, Journals Division, P.O. Box 37005, Chicago, Ill. 60637.

The advance of technology may seem inexorable, but there is no guarantee that consumers will quickly reap the benefits. Sometimes, as with magnetic recording during the 1930s, the

fruits of innovation are deliberately withheld.

In 1930, after outside firms tried to interest it in some form of telephone-answering device, American Telephone and Telegraph (AT&T) had its research arm, the now-renowned Bell Telephone Laboratories, take up the question of magnetic recording. Physicist Clarence Hickman and his colleagues made remarkable progress. By 1934, writes Clark, who has a doctorate in the history of technology from the University of Delaware, "magnetic recording had become a practical method for sound reproduction, one which had a number of potential commercial applications." A prototype telephone-answering machine built that year, although large and complicated, "met all reasonable engineering requirements for performance," Clark says. Similar equipment was used successfully in field tests. Yet AT&T did not offer an answering machine to its customers until the early 1950s—and prohibited the connection of recorders to public phone lines until 1948, when consumer pressure became too great to resist.

Why the delays? Upper-level executives at AT&T, Clark says, feared that if recordings of

conversations were permitted, customers would be less willing to use the phone system. A slip of the tongue recorded during a business negotiation, for example, could be fatal to a deal. Also, some AT&T executives estimated that up to one-third of all phone calls involved matters of an illegal or immoral nature. Even the possibility that recording devices were being used, one manager said, "would change the whole nature of telephone conversations and would in our opinion render the telephone much less satisfactory and useful in the vast majority of cases in which it is employed."

Surprisingly, according to Clark, the managers "paid far more attention to the question of trust and image" than to potential profits. That was a reflection of the public-relations problems AT&T was having as a result of New Deal antitrust investigations.

Having failed to exploit the technological lead it had developed, AT&T lost it after 1940. When the Bell system finally began offering answering machines to its customers in 1951, they were built not by AT&T but by an outside contractor.

ARTS & LETTERS

The Prize for Irrelevance

"The Nobel Prize for Literature" by Renee Winegarten, in *The American Scholar* (Winter 1994), 1811 Q St. N.W., Washington, D.C. 20009.

Jorge Luis Borges, Joseph Conrad, Graham Greene, Henry James, James Joyce, Federico Garcia Lorca, Vladimir Nabokov, Marcel Proust, and Leo Tolstoy—all were great writers, yet all were passed over for the Nobel Prize for Literature. Those honored instead include such now largely forgotten writers as French poet Sully Prudhomme (1901) and American novelist Pearl S. Buck (1938).

Of course, worthy writers, from T. S. Eliot (1948) and William Faulkner (1949) to Czeslaw Milosz (1980) and Joseph Brodsky (1987), have won the Nobel jackpot—now worth \$12,500. (William Butler Yeats's first question upon learn-

ing he was to receive the award in 1923 was "How much?") Yet on the whole, argues Winegarten, an essayist and literary critic, the award's meaning for literature or writers is greatly overblown. And rarely does the prize go to a struggling writer, enabling him or her to do more work. George Bernard Shaw (the 1925 winner) said the Nobel Prize was "a life belt thrown to a swimmer who has already reached the shore."

"The great merit of the Nobel Prize for Literature," Winegarten says, "is that it is international in scope—even if internationalism . . . is a cultural virtue, not strictly a literary one." While the prize is "honorably universal, embracing writers from India (Rabindranath Tagore [1913]), Japan (Yasunari Kawabata [1968]), Nigeria (Wole Soyinka [1986]), the Caribbean (Derek Walcott [1992]), the citations monotonously discuss literature in terms of ethnic identity and