

Current Comments

Introducing *Discover*, Time Inc.'s Monthly Newsmagazine of Science

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An article in *Marketing Communications* hails a "dramatic increase in the amount of consumer-oriented scientific information" published.¹ An editorial in the *American Journal of Physics* asks, "Is there a science craze?"² A cartoon in a recent issue of *The New Yorker* depicts a newsstand selling only science magazines.³

All of this has occurred within the last two years, since I wrote an essay decrying the state of scientific journalism.⁴ It is nice to think there is cause and effect here, but a more likely explanation is that offered by *Science 81* editor Allen Hammond. The generation that went to school in the Sputnik era is now buying magazines.⁵ And science seems to be one of its preferences.

In several past essays I've tried to keep you up-to-date on developments in scientific journalism by reporting on some science magazines, both old and new.⁶⁻⁹ This week I'd like to focus your attention on *Discover*, the newsmagazine of science that *Time* magazine's parent company started last October. So far six issues have been published.

Each issue of *Discover* contains from 90 to 100 pages, about one third of which are full page advertisements. As of the April 1981 issue, full page black and white ads will cost \$10,485 and full page color ads, \$15,210. About a quarter of the magazine's 600,000 readers will buy their magazines on the newsstands at \$2 per copy. The remainder subscribe at \$17.95 per year and depend upon the postal service for delivery.

Foreign subscribers pay \$25. Subscriptions are available from *Discover*, Time-Life Building, 541 North Fairbanks Court, Chicago, Illinois 60611. The editorial office, however, is in New York.

According to *Discover's* managing editor Leon Jaroff the magazine is aimed at the intelligent layreader. "We want to get readers interested in science and we want them to read the magazine from cover-to-cover."¹⁰ That also makes advertisers happy. To this end, *Discover's* editor encourages short but clear treatments of the subject material containing no more than 4,000 words. He thinks "your average intelligent reader stops reading after a while if the articles are too long, if there is too much detail, or if they contain too much jargon." I agree.

Based on preliminary estimates, *Discover* has attracted an affluent readership with a median income of about \$28,000. About 80 percent of its readers are college educated, with 65 percent of the readers male.

Each issue of *Discover* contains about a dozen feature stories and as many regular departments. Unlike *Omni*,⁶ it includes no fiction. The cover usually consists of some brightly colored graphics, either illustrating a feature story inside or taken from the "Gallery" section—a department devoted to photographs of computer art, natural phenomena, and other science-oriented art work. The cover of the December 1980 issue spotlighted the public's fear of

computers. Depicted in cartoon form on the front cover are two people seated at a desk, surrounded by menacing display screens, printers, and tape drives. The story that goes along with the cover cartoon relates instances of computer phobia and even sabotage by those who fear the systems.¹¹ Another cover featured a portrait of the sun's corona. In October, a computer-drawn DNA molecule appeared on the front of the magazine.

As soon as you open *Discover* you are greeted by a contents page that is graphically pleasing. It is not an afterthought like so many we run in *Current Contents*[®] (CC[®]). The titles of the articles are catchy but you must look at the explanations beneath them to understand what the article is about. Authors' names are not listed at all on the contents page, while they are on each article. Even though this reflects the fact that most articles are staff pieces, I deplore the anonymity. Some of the best science reporting today is done by staff writers, e.g., for *Science*.

In-depth feature stories explore topics in scientific disciplines ranging from astronomy and paleontology to dental anthropology and zoology. Medicine and medical technology are prominent but not dominant. Most stories are accompanied by stunning graphics.

In November, *Discover* looked at new ways police medical examiners can analyze blood and other bodily secretions to produce a "genetic profile that narrows the field of suspects considerably."¹² Another feature article in the October issue highlighted the PETT scanner, a scanning device that can reveal brain activity by tracing a chemical as it is used by the brain. The PETT scanner has diagnosed specific patterns of brain abnormality in both manic depressive and schizophrenic patients.¹³

In "Treating the Littlest Patient," author John Langone describes methods for caring for the fetus while it is still in

the womb.¹⁴ "Any treatment within the uterus is dangerous—it can bring on premature labor or cause infection—fetal therapy has most often been carried out by administering a supplement to the mother, or by withholding some harmful substance, like alcohol. But now, more direct therapy is being used. The unborn is being given blood transfusions by a needle passed through the mother's abdomen and uterus and into the fetus itself. Dangerous accumulations of fluid are extracted by needle from various fetal organs...."¹⁴

Not all *Discover* features rely on medical subject matter. "Stalking the City Fossil" is the story of Sidney Horenstein, Hunter College, who examines city skyscrapers in New York for fossils embedded in the walls.¹⁵ The mysteries of the monarch butterfly were covered in another *Discover* piece. The monarch "has one of the most fascinating life cycles found in nature.... Scientists are still trying to discover how the monarch navigates to a destination it has never seen."¹⁶ Yet another article shows how mathematicians discovered how to determine if any number is prime.¹⁷

Discover is called a newsmagazine but many of its feature stories are not time dependent. Some of what *Discover* writes about is current, however. Articles on toxic shock syndrome¹⁸ and the Voyager Saturn mission,¹⁹ for example, cover news that "broke" recently. "The Lennon Syndrome," in February's issue, discusses what psychologists think about the "frenzied grief" over John Lennon's untimely death.²⁰ *Discover's* editorial pages close two weeks before publication to allow current material to be inserted. According to Jaroff, science news that happens one month will be covered the next.¹⁰

Discover might be accused of creating a cult of personality among scientists. Each issue features a profile of a scientist. So far the "Personality" department has profiled Sylvia Earle, curator of phycology at the California

Academy of Sciences and research associate at the University of California;²¹ Jacob Rabinow, an inventor;²² Riccard Giacconi, a pioneer in X-ray astronomy;²³ and Solomon Snyder, Johns Hopkins University psychiatrist and pharmacologist.²⁴ As long as these stories stick to the human side of science they will serve a useful purpose. But the quality of a scientist's work should not be confused with his latest companion.

Since I've known him for over 20 years, we asked Rabinow what he thought about the *Discover* article on him. He thought it was very well-done—that his inventions were portrayed correctly and the right points emphasized.²⁵

In its January issue, *Discover* named a "scientist of the year": Nobel prizewinner Paul Berg.²⁶ Berg shared the 1980 Nobel prize in chemistry with Walter Gilbert and Frederick Sanger. *Discover* made it clear that Berg didn't seek the honor. Indeed, at first, he didn't wish to cooperate with the magazine but later he did relent. The magazine focused its profile on the recombinant DNA work done by Berg and other eminent scientists.

Awards are a popular *Discover* theme. When the 1980 Nobels were announced, the magazine not only covered the work of the winners but also the history of the prize. In his analytical article "Triumph of the Will," author Monte Davis wrote, "...science has diversified since the old dynamite maker's time, and by ignoring that diversity the Nobel prizes fail to reflect all the scientific enterprise they were meant to honor."²⁷ In January, the magazine profiled the Vetlesen Medal for earth sciences, another "Nobel" prize issued by the Swedish Academy on behalf of a scientific benefactor,²⁸ donor Holger Crafoord, director of the medical supply firm Gambro AB.

Besides feature articles, *Discover* has several departments. Lively discussions are often prompted by the letters to the

editor. According to Jaroff, the best read portion of the magazine is the "Skeptical Eye" section. "The reason, we think, is that the section fills a void in U.S. journalism."²⁹ The column is a forum for debunking pseudoscience and myths. For example, a recent "Skeptical Eye" section focused on a New Jersey psychic who has been called on by police to help locate criminals, find victims, and solve crimes.³⁰ Another column revealed scientific evidence refuting claims that the lost city of Atlantis had been found.³¹ "Whenever people are promulgating nonsense in the name of science we let them have it," Jaroff claims.¹⁰

Another *Discover* department is called "Science People." It contains short items on the current activities of some scientists. In the November issue this section highlighted "political scientists"—those scientists who were running for office in the 1980 general election.³² "Science People" items have also spotlighted anthropologist Ashley Montagu. He wants to make a commercial movie about Hungarian physician Ignaz Semmelweis.³³ Since the section is not limited to living persons, Ada Byron was featured in a discussion of a new computer language, Ada, which was named after her. She worked with mathematician Charles Babbage.³⁴

"In the News" is another department made up of short items. January's "In the News" featured new methods of administering insulin; aspirin and Reye syndrome in children; and the Lasker award winners.³⁵ In the "Invention" department, *Discover* explores some recent inventions and newly issued patents: for example, a photographic film that does not retain silver (cutting costs while producing fine grade enlargements),³⁶ and a blanket that can prevent burns in fire victims.³⁷

A highlight of each issue is the monthly essay by Lewis Thomas, chancellor of the Memorial Sloan-Kettering Cancer Center in Manhattan. His essays have covered the need to forget,³⁸ telling the

truth,³⁹ and the need for basic research.⁴⁰

Discover also reviews recent science books, television shows, and movies. Of the movie "The Elephant Man," *Discover* states: "There are moments of interest, most notably some intriguing glimpses of Victorian medicine. Surgeons are seen facing for the first time the problems of worker health and safety wrought by the industrial age."⁴¹ To top off each issue, a full page cartoon by Sidney Harris is featured. Since we have been running Harris cartoons for many years in *CC*, this is a compliment to him and to us. Sidney seems to lack any significant competition.

While the feature articles may introduce non-scientists to topics of interest in science, some might complain that the authors of the articles do not probe deeply enough and that the explanations offered are inadequate. Unlike *Science 81*, which relies on the resources of the journal *Science* for its background information, or *The Sciences*, which is largely written by scientists, *Discover's* writers are not necessarily experts in the fields they are covering.

To these criticisms Jaroff replies that the magazine is still searching for the appropriate level.¹⁰ He points to "Splitting Water"⁴² in the February issue and "Bad Blood over Good Genes"⁴³ in December as examples of articles that explore topics in adequate depth to inform and encourage interest. *Discover* does clearly identify the people interviewed and their affiliations in its stories so the reader may contact them for further information if desired.

While *Discover's* staff is not made up of scientists, managing editor Jaroff has an electrical engineering and mathemat-

ics background. He points out that all his writers have a "moderate to strong science background."¹⁰ Before coming to *Discover*, Jaroff was a senior editor of *Time* magazine and *Time's* chief science writer. Stories edited by Jaroff have won AAAS, American Medical Association, and American Institute of Physics awards.

While *Discover* does not ask scientists to review the stories it publishes, "every fact in each story is checked." Reporters call experts in the field and ask them to confirm facts, putting them in context. "While we are not writing this magazine for scientists, we desperately want to keep their respect" Jaroff noted. "If we start publishing unfounded stories no scientist would want to be quoted in our magazine."¹⁰ But it is unclear to me how one can check a story without reading it. Accurate facts alone do not make for accurate science writing. Unlike *Science 81*, *Discover* does not refer the reader to additional material on the subject.

Judging from the number of letters received from the scientific community, Jaroff believes the magazine is well-read by scientists, not for new information but so they can see how their work is portrayed to the public. This is one of the reasons behind *CC's Press Digest*.

In the near future I intend to continue this series by taking a look at some of the established and well-respected publications like *Scientific American*, *Science*, and *Nature*. Each in its own way plays a part in modern science journalism.

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