

SPOTLIGHT

Pre-Whiz Kid Whiz

BY PATRICK COX

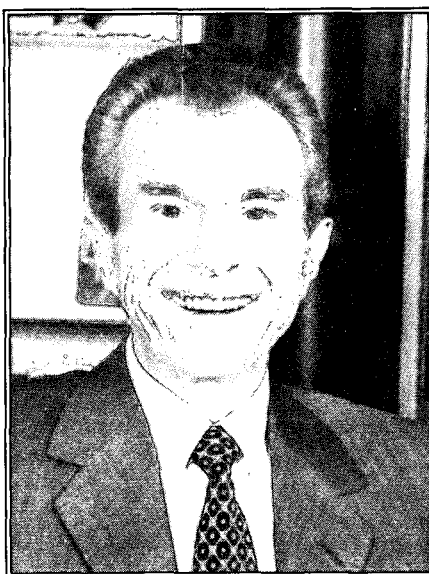
It is unlikely that your life has not been affected by Andrew F. Kay. Though he has recently come to the attention of the business and computer world as the president of Kaypro, Inc., a leading maker of portable personal computers, Kay's influence on our lives is much broader and significant.

Kay's education, an undergraduate degree from MIT and a nearly completed masters in mathematics from Case Institute of Technology, had been cut short by the onset of World War II. During the war, he worked in military-related scientific research and production of such items as automatic pilots. Then, in 1952, after an argument with his employer, a manufacturer of "war machines," Kay decided to move into other areas, and he formed his own company, Non-Linear Systems.

An early project at the new company was to build a "digital volt meter"—an instrument that would measure electrical voltage digitally rather than in analog form (the basis of the traditional needle meter)—which Kay started marketing in 1953. The digital readout device on your wristwatch and stereo—and on nearly every important scientific instrument in the world—springs from the mind of Andy Kay, as he is known. *Electronic Design* magazine has credited Kay for starting the digital revolution, and *USA Today* recently named Kay's invention as one of the 10 most important inventions that led to the computer age.

One of Kay's sons—both of whom are vice-presidents at Kaypro—describes his father as a Renaissance man. On the list of clichés, *Renaissance man* ranks near the top, but in this case the phrase fits; for Kay is noted for another aspect of his business career besides his technical contributions—his management theories have been discussed in textbooks for almost 30 years. Kay has long been a believer in the theory that freedom engenders efficiency and prosperity. He attributes that belief in part to a 10-year period he served on a school board, during which he saw the way tenure was awarded or denied by bureaucracy. He also had worked in factories where all decisions came down from the top, leading to what Kay describes as "the stiltification of people's desire to excel."

During the '60s, Kay's company attracted international attention for its participatory management style. *Business Week* called the firm "a laboratory for the behavioral sciences...a proving ground for some of the newest concepts in 'permissive management.'" Vance Packard described Non-Linear Systems in a *Reader's Digest* article as "one of the most revolutionary companies in Amer-



ANDREW F. KAY

ica." The famous MIT management professor Douglas MacGregor was an ardent fan of Kay's nonauthoritarian technique, and psychologist Abraham Maslow researched his landmark book *Eupsychian Management* at Kay's plant. In effect, Kay invented an American form of what is now called "Japanese management." In fact, during the '60s dozens of Japanese managers spent time on-site studying Kay's management techniques.

It is odd that American technologies and theories have been better accepted in Japan than in the United States. Even though his company had always been successful, Kay found investors hard to come by when he decided to make a move into personal computers. The money he borrowed was expensive.

Last July, the company changed its name to Kaypro. Its computers had hit the market and made headlines in the computer trade, but because of Kaypro's

unorthodox style, Kay's decision to go public with a stock offering met with skepticism from institutions and analysts.

Institutions, which usually buy 50 percent of similar stock offerings, only bought 12 percent of Kaypro's. Michelle Preston, a *Wall Street Journal* analyst, was, according to Kay, amazed to learn that Kaypro spent less than 10 percent of gross sales on marketing. The industry usually spends at least 20 percent. Similarly, Kaypro baffled the experts because its manufacturing-expense overhead was only about 100 percent while the usual ratio is three times that. "We have very little of what are called 'white-collar workers,' and our blue-collar work force is very high," Kay explains. "We don't follow the ratios at all, and the fact that I was 64 didn't help." The planned sale of 5 million shares was ultimately cut back to 4 million. Still, among companies that make computers costing more than \$1,000, Kaypro is the fourth-largest in unit production.

Kay's anti-authoritarian philosophy does not only apply to business. "We have no drawings of the assembly process or formal plans," he says, "but we do have goals. When people who want to work are free to do what they want, the results are remarkable. But our government seems to work against those tendencies. Once we became visible this year, we were visited by seven or eight government agencies in the space of 90 days. One agency is making me get a permit that I was supposed to have 17 years ago."

"Computers are tools of autonomy," Kay says. "They enable people to hide from bureaucrats. They will create more individual liberty as people gain power over the details of life that now take so much energy." Kay says that he has used his own computer to help make his firm's product cheaper and more accessible to the consumer. One has to wonder what he would be doing if he had started out with those "tools of autonomy." Fortunately, we can take advantage of all that he has already done.

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arts & letters

MOVIES

Reviewed by John Hospers

Silkwood

It's not supposed to matter aesthetically whether the book you're reading or the film you're seeing is a true story—just concentrate on it and consider its merits and demerits as a work of art.

Viewed in this way, *Silkwood* is overlong, has numerous dead spaces, and isn't even particularly interesting except for the exceptional acting of Meryl Streep, Cher, and Kurt Russell. What makes people come to see it is that it's based on an actual event. The film is a kind of glossed-up documentary. And since real names of persons, places, and companies are mentioned, one seems entitled to infer that the story is true.

To what extent it is true is, however, a matter of hot dispute. According to the *Los Angeles Weekly*, the film exhibits cowardice in not presenting an all-out indictment of the Kerr-McGee Co. for purposely contaminating Karen Silkwood with plutonium and then killing her in a car "accident" to prevent her from testifying against the firm. But according to syndicated columnist Nick Thimmesch, "The fact is that Silkwood's crash was thoroughly investigated by all manner of authorities right up to the U.S. Congress. The conclusion was that there was no foul play, that it was a classic single-car driver-ran-off-the-road accident. Silkwood was under the influence of drugs at the time of the accident. Her autopsy revealed that she had .35

milligrams of methaqualone (per 100 milliliters of blood) in her blood...and 49.53 more mg. in her stomach. She had overdosed for months, and her physician had to confiscate drugs from her. Just two weeks before the fatal accident, she was injured when her car ran off the road in the same fashion."

As director Mike Nichols indicates onscreen at the end, nobody knows what really happened, but he does say that a posthumous blood test showed the



Meryl Streep as Karen Silkwood in *SILKWOOD*: Is the viewer being made a fool of?

presence of methaqualone in her. Perhaps he stayed neutral in order to avoid a lawsuit. Nevertheless, all the hints planted throughout the film are slanted against Kerr-McGee. The undertaker says that all the corpses from Kerr-McGee "look dead before they're dead"; Silkwood reads from a report that "there is no safe level of plutonium"; and a lab technician admits to her that he falsifies the X-rays that show whether or not there is any structural defect in the products he delivers to the breeder reactors in Hanford, Washington (which, if true, could have catastrophic effects).

But is it true? *Silkwood*, according to the film, had been preparing documents against the company on this, but in fact no documents were ever found. What is the truth of the matter? These, rather than puzzles about the film itself, are questions that linger in the audience's mind as they leave the theater. There are doubtless persons alive who do know, but since the viewer does not, the effect of the film is, to say the least, unsettling.

Even more unsettling, however, is the suspicion that readers and viewers are being made fools of in the whole affair.

Though there has been very little attention to it in the press, a distinguished physicist, Prof. Bernard Cohen, has offered "to inhale, on TV, 1,000 particles of plutonium of any size that can be suspended in air, or to eat as much plutonium as any prominent critic will eat caffeine" (Petr Beckmann, *Access to Energy*, February 1984). Why has his offer never been accepted, nor even publicized? (According to Beckmann, Cohen "is being silenced and censored, not by the government, but by the media moguls whose mouths pay tribute to the freedom of the press even as their hands strangle it.") And if Cohen is right about plutonium, what happens to *Silkwood's* case?

The Right Stuff

Though more than three hours long, *The Right Stuff* is absorbing cinematic fare from beginning to end. It's a good old-fashioned type of film, full of courage and heroism and conquest over nature (not, for a change, over other people). It is, on the whole, a true story, beginning with the breaking of the sound barrier and ending with Gordon Cooper's orbiting around the earth. It includes in its scope John Glenn's first venture into space, but not the astronauts' trip to the moon.

Except for a few scenes containing gutter language, which are quite gratuitous, this film could have been made in the 1950s. (This is not a put-down but a compliment, since the general tenor of films was much more positive and upbeat then than now.) There is a contagious spirit of camaraderie developed among the astronauts. There is also their total dedication to their enterprise, a dedication that is most striking in John Glenn (portrayed by Ed Harris) and the lone flier (portrayed by Sam Shepherd) who, Gary Cooper style, shuns publicity but repeatedly risks his life in a plane to conquer new boundaries of the unknown. The result is that one emerges feeling good about the world and about man's hopes and dreams—not so much a feeling of patriotism as of unabashed admiration of courage and tenacity and idealism.

Though the film is long, it's difficult to think of scenes that should have been cut; it all hangs together. The only slightly jarring notes are the somewhat absurd caricatures of the military and of Lyndon Johnson as a craven publicity-

THE BEST OF '83

THE RETURN OF
MARTIN GUERRE
TERMS OF ENDEARMENT
NEVER CRY WOLF
LA NUIT DE VARENNES
THRESHOLD
TENDER MERCIÉS
DANTON
THE RIGHT STUFF

—J. H.