of America (RCA), for example, declared in a 1952 ad that its "years of research and engineering" were opening the way for television service throughout the land. Bell Telephone Laboratories, in another ad, hailed the impending introduction of its "tiny amplifying device" (the transistor) to the world of telephone communications. But such proud corporate refrains are not being sung so loudly these days, reports *Scientific American* staff writer Elizabeth Corcoran.

"Even prominent laboratories have been sold or shuttered," she writes. "RCA's research center, where liquid-crystal displays were invented, was simply given away." Overall, the growth of investment in U.S. industrial research and development (R&D) has slowed in recent years. Investment grew by only 1.5 percent annually in 1985–90, compared with almost seven percent in 1975–85.

Companies now confront a changed economic environment. "Tax policies, demands for quick financial returns and takeover threats have discouraged long-term strategies based on investing in research," Corcoran explains.

But if corporate R&D has fallen on hard times, it is partly because of its own past (economic) performance. Fewer than half the companies that gave birth to an important invention in the last few decades made much money from it, according to Charles H. Ferguson, an industry analyst at the Massachusetts Institute of Technology. "From the window of the corporate finance office," Elizabeth Corcoran notes, "the research center has looked more like a resort for misplaced academics than a business division. Scientists often seem motivated by obscure, intensely personal goals rather than by company goals."

But the scientists are not the only culprits. Although the first color printer was built at Xerox's Webster Research Center, near Rochester, N.Y., Xerox's competitors were more successful at exploiting the new technology. At Xerox, IBM, and a few other U.S. firms, corporate leaders have come to perceive the research "problem" as a matter of managing innovation, Corcoran reports. "If an invention is too far outside the company's agenda to exploit, both research and management must ask themselves why research wandered so far afield. When relevant inventions are not translated into commercial innovations, management must bear some of the blame."

The redesign of corporate R&D, however, can be carried only so far. There must be room for researchers to engage in "longer-term thinking," a Xerox manager told Corcoran, or the "research" becomes so narrowly focused as to be of almost no consequence.

ARTS & LETTERS

Unforgivable?

"Nat King Cole" by Terry Teachout, in *The American Scholar* (Summer 1992), 1811 Q St. N.W., Washington, D.C. 20009.

Singer Nat King Cole's 1951 hit, "Unforgettable," transmuted by modern recording technology 40 years later into a duet with his daughter Natalie, soared to the top of the pop charts last vear. Few of his new fans knew that Cole (1919-65), one of America's most successful popular singers in the 1950s and '60s, had before then been an outstanding jazz pianist. Nat King Cole, said New Yorker jazz critic Whitney Balliett, "belonged with Earl Hines and Art Tatum and Teddy Wilson, from all of whom he learned, and if he had concentrated on playing rather than on singing he might well have outclassed them all." That he did not concentrate on his piano playing in the postwar decades was, in the eyes of many jazz critics and historians, unforgivable, a result of his having "sold out." Cole signed with Capitol Records in 1943, and Capitol's greedy executives, according to

the indictment, soon had him singing saccharine ballads and working with studio orchestras. Cole "capitulated to the evils of the capitalist system," as one recent critic put it, and so his great potential as an artist went unrealized. That is the legend of Nat King Cole, but it fails to stand up to close scrutiny, asserts Teachout, a writer who is working on a biography of H. L. Mencken.

"To begin with," Teachout says, "Nat Cole was a singer of real stature, Frank Sinatra's only rival as the most distinguished popular vocalist of the '50s." In addition, Cole began singing in public not in 1943 but in 1937, shortly after his King Cole Trio was formed. Finally, Teachout says, there is the evidence of the 349 tracks from 1943–61 in the recently issued Complete Capitol Recordings of the Nat King Cole Trio. "Some are jazz oriented, others



A master of two instruments, the piano and his voice.

purely popular, but virtually all, early and late, are the work not of a cynical purveyor of musical pabulum but of a jazz pianist of the first order."

In 1945, Cole was both a jazz star and a pop idol, able to shuttle easily between one role and the other. In the ensuing years, however, that became difficult, Teachout says. "The postwar American popular music scene was dominated by stand-up singers [who played no instruments]. Most of the big bands of the 1930s and '40s had folded, and instrumental jazz, which achieved a certain amount of general popularity during the swing era, lost much of its commercial appeal with the rise of bebop." Cole, Teachout says, chose to move with the times. In the fall of 1951, he quit playing jazz altogether and became a full-time singer. With songs like "Unforgettable," "Mona Lisa," and "Too Young," he achieved the mass popularity he had long sought.

Contrary to the legend, Teachout maintains, Cole's success did not come at the expense of his artistic integrity. "Those who criticize him for giving up the piano fail to recognize that the magic heard in his jazz piano playing of the '40s did not suddenly dry up and blow away in 1951. It was now simply expressed in terms of a different instrument—his voice."

The Passion Of T. S. Eliot

In his famous 1919 essay on "Hamlet and His Problems," T. S. Eliot (1888–1965) pronounced Shakespeare's masterpiece "an artistic failure." The title character, he insisted, "is dominated by an emotion... in *excess* of the facts as they appear." This, to Eliot, was unacceptable. "The only way of expressing emotion in the form of art," he maintained, "is by finding an 'objective correlative'" for that emotion. In his criticism and, as it seemed at the time, his poetry, observes Louis Rubin, a professor emeritus of English at the University of North Carolina at Chapel Hill, Eliot presented himself as "the

anti-romantic, the severe moralist who would

"The Passionate Poet and the Use of Criticism" by Louis D. Rubin, Jr., in *The Virginia Quarterly Review* (Summer 1992), One West Range, Charlottesville, Va. 22903.

suppress the brazen assertion of personality through immersion in the literary tradition." Ironically, Rubin says, there is hardly "a poet of any era the rhythms of whose verses throb with more autobiographical passion than Eliot's, while his criticism, which once seemed so calm and magisterial, now appears to constitute a strenuous and even desperate insistence upon personal coherence in the face of near-chaotic emotions."

When the American-born Eliot embraced England and set out to conquer literary London, he left behind him his native land and his family's expectations that he would pursue an