grow the burden of her father's ideological obsessions ("Socialist Pleasures"), a man who affects idiosyncracies to appear "interesting" ("Schoolgirls"), a painter who burns out and has "nothing left but ideas" ("The Incurable Vices")—these are some of the characters who people the more "traditional" stories of this collection. In her more experimental pieces, Riding turns the story form inside out, commenting on the nature of the story itself. The narrator of "Reality as Port Huntlady" remarks on the silliness of her narrative and, by implication, all narratives: "Here we are telling ourselves a story about a place where people fancied themselves to be dealing with these few really important things, without knowing ourselves exactly what they are." Riding sometimes pushes her experiments too far—analysis can exhaust—but the austere cadences of her prose (reminiscent of Gertrude Stein at her best) pull one through these dry stretches.

Science & Technology

GENES, RADIATION, AND SOCIETY: The Life and Work of H. J. Muller
by Elof Axel Carlson
Cornell, 1981
457 pp. $29.95

Beginning with his participation in the pioneering of classical genetics while still a graduate student at Columbia University, H. J. Muller (1890–1967) sought not only to establish the gene as the basic unit of life but also to defend Darwinism and eugenics. Toting fruit flies and theories across three continents, throwing himself into professional controversies, Muller helped map the mechanism of the individual gene, postulated genetic recombination and crossover, and voiced the first warnings against the mutagenic risks of radiation—a personal crusade derided both by the U.S. government and by doctors until after World War II. Most of Muller's scientific positions were vindicated by later advances (the Watson-Crick model of DNA, for instance). But as Carlson, a biologist at the State University of New York, points out, Muller's socialist convictions led to troubles and disillusionment. FBI reports of his radical activities drove him from a teaching position at the University of Texas in 1932. But

four years in Stalin's Russia (1933–37) instructed him in the realities of totalitarianism, as he confronted the Lysenkoists, who worked from the specious theory that genes were directly influenced by environment. Muller finally received a professorship at Indiana University in 1944 and the Nobel Prize two years later—tardy recognitions of his groundbreaking research. Carlson's chronicle is an even-handed, thorough biography, although the science receives more attention than the man.

RED STAR IN ORBIT
by James E. Oberg
Random, 1981
272 pp. $12.95

Valentina Tereshkova, first woman cosmonaut.
From Red Star in Orbit *by James E. Oberg.*

A launch pad catastrophe, a secret cosmonaut town, a nearly fatal spacewalk, a woman in space—the history of the Soviet space program has all the elements of a good science fiction thriller. Only a few outsiders, however, have been able to reconstruct it, even partially. Oberg, a computer analyst at NASA and one of the West's leading space "detectives," sifts through the records—misleading *Tass* and *Pravda* news releases, official Soviet biographies, airbrushed cosmonaut photos, and the spadework of other Western observers—to present the most authoritative account to date. Soviet Premier Nikita Khrushchev forced technicians in the early years to bolster his politics and propaganda with immediate, sensational launches. Though this policy brought triumphs (e.g., the world's first manned space flight, in 1961, by Yuri Gagarin), it caused frequent disasters. The explosion of a balky rocket booster in 1960 killed many of the Soviet Union's finest space technicians. Since Khrushchev's ouster in 1964, a more rational, less hurried, approach has developed. Results have been dramatic, including record stints in Salyut space stations. At the center of Soviet success lies the story of Sergey Korolev, a survivor of Stalin's "gulag" camps and Khrushchev's chief rocket designer. While his ships made history, Korolev himself was kept under virtual "house arrest" until his death in 1966.