

is natural or normal.

In his life, too, Foucault attempted to break out of the self-contained social circle in which power and knowledge reinforce each other. The sociologist Pierre Bourdieu described Foucault's project as "a long exploration of transgression, of going beyond social limits." To break from his native country, Foucault took teaching positions in Sweden, Poland, Germany, Tunisia, Brazil, Japan, and the United States. In 1966, his *Order of Things* became a best seller ("Foucault Selling like Hotcakes" ran the *Nouvel Observateur* headline), and in 1970 he was appointed a professor at the Collège de France. By then he had succeeded Jean-Paul Sartre as both the reigning French philosopher and the leading militant opposed to "courts, cops, hospitals, asylums, school, military service, the press, television, the State."

Foucault's story is not without its ironies. The man who challenged the entrenched orthodoxies was rewarded with international fame. Two thousand people attended his 1983 lecture in Berkeley on "The Culture of the Self;" indeed he was well on his way to becoming the new orthodoxy. A sadder irony is that Foucault, who had made a principle of transgressing limits, died of AIDS in Paris on June 25, 1984. "But couldn't everyone's life," Foucault once asked, "become a work of art?" Eribon suggests that Foucault's life, despite its fragility and sadnesses, was proof of that possibility.

### Science & Technology

**ECOCIDE IN THE USSR:** Health and Nature under Siege. By Murray Feshbach and Alfred Friendly, Jr. Basic. 376 pp. \$24

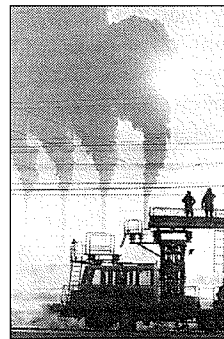
Embarrassed by Russia's backwardness, early Stalinist planners embarked on one of the great romances of history in their embrace of industrial progress. Propaganda posters in the 1930s depicted smokestacks bathed in ethereal orange and yellow soot as the very image of beauty. Open-pit mines became symbols of growth, prosperity, and, above all, hope.

A half-century later the former Soviet Union stands on the brink of ecological disaster. Feshbach, a Georgetown University professor of demographics, and Friendly, a former

*Newsweek* Moscow bureau chief, estimate that three-fourths of the commonwealth's surface water is polluted. Toxic chemicals, used to compensate for inefficient collective farming (to which the Soviets were committed ideologically), have turned most drinking wells into carcinogenic cocktails. "Mother Volga" is an open sewer, as are the Dniepr and Don rivers. As "the greatest single, man-made ecological catastrophe in history," Feshbach and Friendly point to the shrinking of the inland Aral Sea through relentless irrigation projects. Storms now carry toxic salts from the Aral's dry beds across Central Asia. Exposed to the virulent pesticides used in the irrigated cotton fields, mothers in the Aral region cannot breast-feed their babies without running the risk of poisoning them. The mind-numbing toll goes on and on: Half the young men who reported for military duty in 1991 were unfit to serve. The ecological crisis has in turn engendered a health-care crisis: Clinics and hospitals lack the trained staff and medical supplies (or sometimes even the plumbing) needed to deal with the sick who queue up in long lines.

How to make sense of this catastrophe? Some observers claim that Russia fulfilled its own propagandistic description of an evil imperial power: Moscow treated the peripheral republics like colonies, exploiting them for Mother Russia's benefit. Feshbach and Friendly reject this interpretation, pointing out that the ecological ravages within Russia are no less severe than in the other former republics. Instead, they blame Marxist theory, which held that labor created all value: Nature was neutral, merely indifferent raw material, for humankind to use however it saw fit. "We cannot expect charity from nature," ran one Stalinist-era slogan, "we must tear it from her."

The writer Pyotr Chadayev long ago lamented that it was Russia's fate to serve as an example to the world of how not to live. The authors think that the tragedy of Chernobyl—to which the Soviets officially attributed 31 deaths, and which one



American biophysicist estimated killed 50,000—may well have been a turning point, stirring public indignation and indirectly hastening the collapse of the Soviet Union. Cold Warriors may thus gloat while reading *Ecocide*. But what happened in the Soviet Union—where resources that should have supported sound health and ecological policies were diverted to military use—was, Feshbach and Friendly show, in some respects only an amplified version of what has happened in the United States and other industrialized nations.

**THE DIVERSITY OF LIFE.** By Edward O. Wilson. Harvard. 424 pp. \$29.95

Would you like to have a species of flora or fauna named after you? Then take note of Harvard entomologist Wilson's observation that in a tropical rain forest today the variety of species is so great that "the chances are high, in fact certain, of finding a new species . . . within days or, if you work hard, hours after arrival."

Wilson is not writing a travel prospectus for an Amazon tour. He is America's most renowned sociobiologist, studying the correlation between environment and behavior, and here he examines how the present destruction of ecosystems—rainforests, coral reefs, grasslands—may affect life on this planet. Five times before, he tells us, the Earth has suffered "extinction spasms." Meteor strikes, volcanic eruptions, or extreme climatic changes have variously wreaked havoc on the planet's biological population. Ten to 100 million years of evolution were required to repair the damage wrought by each of the cataclysms. Wilson warns: "The sixth great extinction spasm of geological time is upon us," this time wrought by that biological latecomer, man. At the current rates of extinction, by the year 2020 we may "lose at least one-quarter of the Earth's species."

Many people who live far away from rain forests, or any forests, may wonder whether the world will really be a poorer place if the occasional snail darter or spotted owl is lost. Wilson has an answer to their insouciance. Only about

1.4 million species out of a total of between 10 and 100 million have been "discovered," in the sense of having had a scientific name applied to them. Of these, "fewer than 10 percent have been studied at a level deeper than gross anatomy." Consequently, our knowledge of life on this planet is limited to the study of less than one percent of its inhabitants. With the extinction of countless unknown species, Wilson writes, "new sources of scientific information will be lost. Still undeveloped medicines, crops, pharmaceuticals, timber, fibers, pulp, soil-restoring vegetation, petroleum substitutes, and other products and amenities will never come to light."

Besides this forfeited cornucopia, there is another reason to halt the elimination of the Earth's fauna and flora. Scientists, Wilson says, "entertain only a vague idea of how ecosystems work." Nor do they know when a vanished species will prove to have been a "keystone species," one that provides the foundation for an entire ecosystem. Although it might seem plausible to dismiss many species, say of bugs and weeds, as unimportant, Wilson reminds us that "an obscure moth from Latin America saved Australia's pastureland from overgrowth by cactus." Even so seemingly minor a change as in the pH in seawater will cause the kelp to die, and, when that happens, whales that feed on kelp wash up and perish on the shore. Wilson's roster of crucial species adds up to an impressive brief for the living kingdom.

It may need that defense. Many people find nothing wrong in a world in which medicines would be synthesized only from chemicals, food grown only from domestic crops, and the air and climate "regulated by computer-driven fusion energy." The belief "that people can flourish apart from the rest of the living world" is of quite recent vintage, Wilson says, and could be a delusion. The life-sustaining ecosystems that enrich the soil and create the very air we breathe depend upon innumerable tiny animals and organisms—in other words, on weeds and bugs. If we sever our connection to this biodiversity, Wilson concludes, our fate could be like that of the whales that suddenly strand themselves on strange shores.