Random Samples:

Science by Committee

"The game of status-seeking, organized around committees, is played in roughly the same fashion in Africa, in America and in the Soviet Union. Perhaps the aptitude for this committee game is part of our genetic inheritance, like the aptitude for speech and for music. The game has profound consequences for all of us. . . . The large and fashionable squeeze out the small and unfashionable. . . . Fortunately, the American academic system is pluralistic and chaotic enough so that first-rate small science can still be done in spite of the committees."

—Physicist Freeman Dyson, in a commencement address the College of Wooster, Wooster, Ohio.

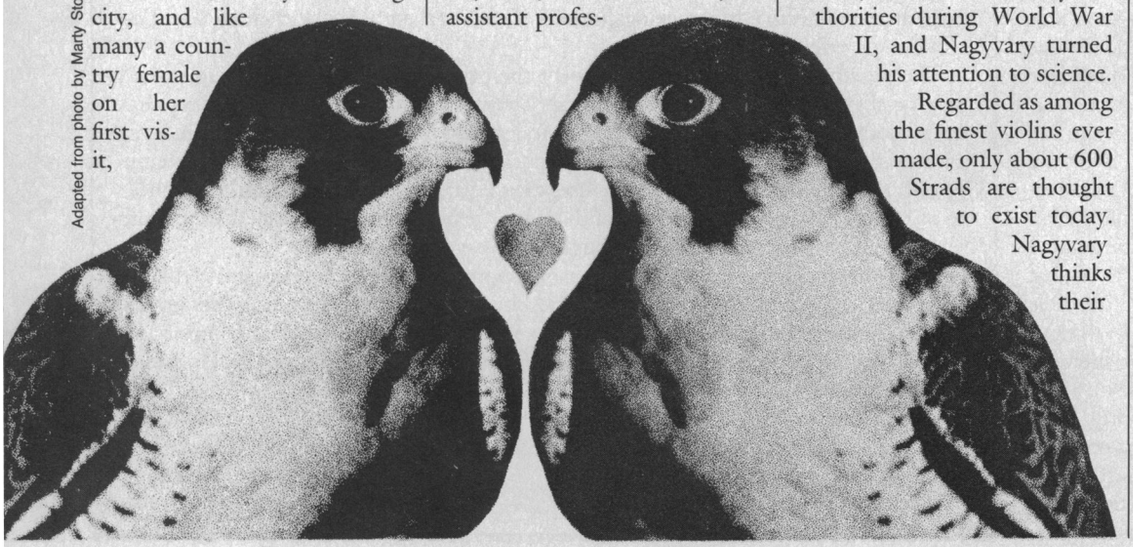
Love Story

This is the story of two lovebirds, Red-Red and the handsome stranger, played out against the skyline of New York City.

Red-Red hails from Ithaca, New York, and spent some time at Cornell University. Two years ago she left Ithaca for the wilds of Maine. She then found her way to the big city, and like many a country female on her first visit, found herself literally swept off her feet by a city-dwelling male. The romance blossomed, and in mid-May, Red-Red gave birth at the New York Hospital–Cornell Medical Center, accompanied by her beau.

An ordinary story, one of millions in the Naked City, except that Red-Red and her handsome stranger are peregrine falcons. [Her name comes from the affectionate nickname of Cornell ("The Big Red") undergrads who also get their M.D.'s from Cornell—Double Reds.] The raptor romance is significant because it's part of the resurgence of the endangered peregrine. Red-Red and mate are one of 67 known nesting pairs in the eastern United States, according to Phyllis Dague of Cornell's Peregrine Fund. That compares favorably with the situation 8 years ago, when no nesting pairs were known in that part of the country.

Red-Red was born at Cornell's peregrine breeding facility. After her release in Arcadia National Park in northeastern Maine, she miraculously found her way to the Cornell-affiliated Medical Center, a towering tiered building in the wilds of Queens. (Peregrines are fond of nesting on tall buildings and bridges, Dague said.) She nested on a ledge between the 24th and 25th floor on the eastern side of the building, turning staff into lunchtime bird watchers, said John M. Aronian, an assistant professor of clinical surgery and amateur bird watcher who has been dubbed the two baby falcons' godfather. The nearby open spaces and water provide her family with all the pigeons, starlings, and sparrows they need, Aronian says.



Adapted from photo by Marty Stoofer/Animals Animals

> ***"If asked to name varieties of mental torture, most scientists would place writing at the top of the list."***
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> —Nobel laureate Arthur Kornberg of Stanford University Medical Center, quoted in *Stanford Medicine*

Fiddling Around the Lab

If Joseph Nagyvary's boss finds him fiddling around on the job, he's not necessarily displeased.

Nagyvary, a biochemist at the College of Agriculture of Texas A&M University, spends most of his time synthesizing oligonucleotides and pondering the role of fiber in nutrition. But he also has an interest in the chemistry of violins, especially the fabled ones made in 18th-century Cremona, Italy, by Antonio Stradivari.

Hungarian by birth, Nagyvary has had a lifelong love affair with the violin, and as a child dreamed of becoming a concert violinist. But the boy's violin, like most musical instruments, was confiscated by authorities during World War II, and Nagyvary turned his attention to science.

Regarded as among the finest violins ever made, only about 600 Strads are thought to exist today. Nagyvary thinks their fine sound results from the chemistry of the wood and varnish used. Scanning electron micrographs he's taken of wood samples from 18th-century violins reveal remnants of fungi and bacteria that made the wood unusually permeable. He speculates that wood for northern Italian violin makers was cut and then transported downriver to Venice, where it remained in a lagoon until needed, soaking up the rich broth of microorganisms in the water. Micrographs he's taken of varnish specimens from instruments of that era reveal large quantities of finely ground minerals, which would have permeated the wood, improving the sound. Nagyvary describes his ideas in detail in the 23 May issue of *Chemical & Engineering News*.

His theory is highly controversial, because for the past 150 years violin makers largely have used impermeable wood with a soft varnish—precisely the opposite of Stradivari's presumed process. But Nagyvary thinks his data are irrefutable and the 30 violins built and finished to his specifications, living proof.

Ola Rudner, concertmaster of the Vienna Chamber Orchestra, recently played several Nagyvary violins. "I like them very, very much," Rudner said in an interview. "They have a beautiful big tone and a robust sound. I think they have great promise."

The state of Texas seems to agree. The state legislature recently gave the chemist a $275,000 start-up grant for a new business that Nagyvary hopes will make Texas the violin-producing capital of the United States—a sort of 20th-century Cremona.

■ GREGORY BYRNE