

Those who do are not the norm; they are people who need the help and protection of their physicians. The death-dealing Dr. Kevorkian instead “trades upon the vulnera-

bilities and mental disorders of these patients and in so doing makes a mockery of medicine as a discipline of informed concern for patients.”

Chilling Out Los Angeles

“Painting the Town White—and Green” by Arthur H. Rosenfeld, Joseph J. Romm, Hashem Akbari, and Alan C. Lloyd, in *Technology Review* (Feb.–Mar. 1997), Bldg. W59, MIT, Cambridge, Mass. 02139.

Los Angeles could be a cool place. But right now, it isn't. On a typical summer day, the temperature in central L.A. is a full five degrees F. higher than in the surrounding suburbs and rural areas. Many other big cities are also overheated. Is this, as many assume, due mainly to heat generated by cars, office buildings, and factories in the city? Guess again, say Rosenfeld, Romm, and Akbari, who are with the U.S. Department of Energy, and Lloyd, who works at the Desert Research Institute in Reno, Nevada. That heat accounts for only one percent of the temperature difference. The chief culprit, they say, is dark surfaces, such as roofs and asphalt pavements, which absorb heat that lighter surfaces would reflect away.

“With white roofs, concrete-colored pave-

ments, and about 10 million new shade trees,” the authors point out, “Los Angeles could be cooler than the semidesert that surrounds it, instead of hotter.” Besides providing cooling shade, the trees would soak up groundwater, which then would “evapotranspire” from the leaves, indirectly cooling the surrounding air.

Reducing the average summer afternoon temperature in Los Angeles by five degrees, the authors calculate, would cut the need for air conditioning by 18 percent and lower the smog level. The energy savings, not to mention the reduction in medical costs, would be substantial. But it would take about 15 years to achieve this effect. “Los Angeles, or any other large city,” the authors note, “cannot be cooled in a day.”

Stop Talking Race

“Bred in the Bone?” by Alan H. Goodman, in *The Sciences* (Mar.–Apr. 1997), New York Academy of Sciences, 2 E. 63rd St., New York, N.Y. 10021.

Most anthropologists agree that race is an unscientific concept, that distinct biological races simply do not exist. Yet even scientists themselves fall into the race trap, observes Goodman, an anthropologist at Hampshire College, in Amherst, Massachusetts.

Anthropologists and medical and health professionals use race “as a shorthand to describe human biological variations,” he says, even though those variations “blur from one race into the next, and are greater *within* so-called races rather than among them.” Whether racial shorthand is employed in police work, medical studies, or public health situations, Goodman argues, the fact remains that “race science is bad science” and can be misleading, even dangerous.

Take forensic anthropologists, for example. They maintain that while race may be “socially constructed,” the people in one racial category still tend to look enough alike to make “race” useful in police forensics. To

back this up, Goodman says, the anthropologists often cite a study done in the early 1960s suggesting that it is possible to correctly identify the “race” of a skull between 85 and 90 percent of the time. But, he writes, in three of four efforts to replicate the study, “the formula proved less accurate than a random assignment of races to skulls—not even good enough for government work.”

Race thinking, Goodman contends, sometimes leads criminal investigators needlessly astray. That happened in the aftermath of the 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City. A forensic anthropologist concluded that a leg found in the rubble that did not match any of the recovered bodies probably came from a “darkly complected Caucasoid” male. But the leg eventually turned out to belong to a woman who was, according to one forensics expert, “obviously black.”

The use of race as shorthand in medical

work provides similar miscues, Goodman maintains. For example, when public health and medical professionals list race as a risk factor in osteoporosis (a progressive loss of bone mass), which disproportionately afflicts whites, they are encouraging the mistaken assumption that blacks do not get the disease—and therefore are not in need of pre-

ventive care or other help.

The way for scientists and others to avoid the confusion and false leads—and the encouragement to racism that race thinking provides—is simple, says Goodman: stop using racial classifications and refer to specific traits instead. Why say black or white when “darkly complected” are the truest words?

The Mask of the Machine

“Seeing through Computers” by Sherry Turkle, in *The American Prospect* (Mar.–Apr. 1997), P.O. Box 383080, Cambridge, Mass. 02238.

When the personal computer burst on the world in the 1970s and early '80s, educators believed that a “computer literate” student would need to learn to look “inside” the powerful calculators and understand how they worked, at least in principle. No longer, writes Turkle, a science sociologist at the Massachusetts Institute of Technology. Today, the young learn only how to use the PC as “an information appliance,” becoming marvelously adept, but prey to new information-age illusions.

Before the mid-1980s, computers were not very user-friendly, she notes, and to get them to work, it helped to know something about programming. But increased processing power made it possible to build graphical user interfaces (GUI), “which hid the bare machine from its user.” Apple’s Macintosh desktop computer, introduced in 1984, represented “a way of thinking about the computer that put a premium on the manipulation of a surface simulation.” Then came Windows software. Soon, “people did not so much command machines as enter into conversations with them.” Computer users began to take things “at (inter)face value.”

Computer education in schools now tends to involve learning how to run word processors, spreadsheets, databas-

es, Internet search engines, and other programs. Nothing wrong with that, Turkle writes. But that narrowly practical aim should not be the main goal. Students should be taught how to critically “read” what their computers do and to ferret out hidden assumptions. By playing *SimCity*, for instance, students may find out more about the difficult tradeoffs involved in governing a city than they would from a textbook. But simulations can also be misleading. One young *SimCity* player informed Turkle that “raising taxes always leads to riots,” not realizing that a game based on other assumptions might yield a very different result. In subtle ways, Turkle suggests, the computers we play are beginning to play us.



Do students see beneath the surface of scenes such as this from the computer game SimCity?

ARTS & LETTERS

And Not a Drop to Drink

“The Crushing Power of Big Publishing” by Mark Crispin Miller, and “Gutenberg Unbound” by Tom Engelhardt, in *The Nation* (Mar. 17, 1997), 72 Fifth Ave., New York, N.Y. 10011.

A visitor to a Borders or Barnes & Noble superstore, marveling at the thousands of vol-

umes on view and at all the people busily browsing and buying, might conclude that