possible to "reseed the body with our own cells that are made more potent and younger."

The question can't be resolved today, *Science* writer Constance Holden points out, because there is no reliable "biomarker" in the body—some change that occurs in all humans regardless of environment—that would allow researchers to compare aging rates in different individuals, and thus reliably predict how long people might plausibly live. "At this point," says Holden, "the most reliable biomarker for aging is death."

## The Last Guru?

"The Cult of Castells" by James Crabtree, in *Prospect* (Feb. 2002), 4 Bedford Sq., London WC1B 3RD, England.

The first years of the new century haven't been kind to the late 20th century's bumper crop of cybergurus. One of the few still standing is also one of the most unlikely: the 57-year-old Spanish-born, French-educated, ex-Marxist professor of sociology and planning at the University of California, Berkeley, Manuel Castells.

A pile of thick, jargon-clotted books attests to Castells's great industry. His 1,200-page information age trilogy (1996–98) is regarded in some academic circles as a masterwork on a par with those of Karl Marx and Max Weber. Castells has been called the "Voltaire of the Information Age." In a new book, *The Internet Galaxy*, he is reaching for a wider audience.

Crabtree, a researcher at Britain's Industrial Society, is respectfully skeptical. He explains that just as Marx put the state at the heart of the social order and Weber put bureaucracy, Castells puts networks, such as the Internet. They are the "prime organizational form" of the information age. Electronic communications networks, along with the social and cultural revolutions that began in the 1960s and the global economic restructuring that started in the 1980s, are the driving forces in modern society. The decline of stable organizations and fixed values creates far-reaching change. As Crabtree puts it: "The network citizens, stripped of certainty and security while cocooned in networks they cannot control or comprehend, become dominated by the search for personal or collective identity. Some adapt well, while others react aggressively."

Crabtree sees a lot of flaws in Castells's thought. His work is full of jargon — "timeless time," "the space of flows" — and it often sacrifices precision and careful definition of ideas for the sweeping assertion. There's not much evidence that Castells's ideas have a great deal of explanatory or predictive value. And very often Castells seems to "shoe-horn" into his grand theory things that don't fit. He tries to incorporate the Qaeda terrorists into his model of "networked dissent," but Crabtree observes that the group in some ways is the antithesis of a network. For example, it "deploys autonomous cells defined by their *not* being in constant contact with the whole group."

For all that, Crabtree concludes that Castells's reputation is largely justified. His network society is "an imperfect roadmap, perhaps no more than a useful metaphor." Yet it is the most useful roadmap we have. If it now seems somewhat commonplace, it is only because Castells's ideas have carried the day.

## Glowing with Optimism

"The Changing Climate for Nuclear Power in the United States" by Richard Meserve, in *Bulletin* (Winter 2002), American Academy of Arts & Sciences, 136 Irving St., Cambridge, Mass. 02138.

"The demise of the nuclear power industry was widely expected only a few years ago" writes Meserve, chair of the U.S. Nuclear Regulatory Commission. But things may be changing. While the number of nuclear plants has dropped from 111 to 103 since 1990, the amount of electricity these plants produce has increased by nearly 40 percent. Although that 750 billion kilowatt-hours (kWh) of