

January 6, 2002

FIVE QUESTIONS

The New York Times

Joseph F. Coates Keeps a Practiced Eye on the Future

By LYNNLEY BROWNING

Talking sweaters. A cure for schizophrenia. Cars that drive themselves to school to pick up your children. These are some of the things that Joseph F. Coates sees in the next 10 years. Mr. Coates, a futurist, analyzes technological, economic, political, social, cultural and demographic trends for businesses and government and industry organizations, and predicts what may happen in the next 5 to 50 years.

Mr. Coates is the retired president of Coates & Jarratt, a 22-year-old consulting company in Washington that gazes into its crystal ball for the likes of Coca-Cola, Ford Motor, the Central Intelligence Agency and the Smithsonian Institution. Mr. Coates, who now has his own consulting company, Joseph F. Coates Consulting Futurist, offered a few prognostications on Thursday. Here are excerpts.

Q. After Sept. 11, people predicted that business and government would change forever. Have they? How?

A. The main change affecting business and government is that you can no longer give casual acknowledgment that you are part of a larger system. Business and government are going to be forced to acknowledge this. They haven't been attendant to vulnerabilities. Business, in particular, tends to give little attention to the rare, the unusual, the unexpected and the offbeat.

Q. In what areas do you forecast the biggest changes?

A. The most interesting thing that's beginning to unfold at an increasing pace is molecular biology, molecular genetics. We're going to find pressure on people— family members, friends, employers—if there's a disease in the family to go and get a test. Prevention and treatment will follow much more slowly. But diagnostics will be quick, cheap and very important, and out of that will come the growth of genetic counseling.

Also, we are on the edge of the earliest forms of brain technology. All the things you'd say about your car or gas stove, you'll say about the brain. Fix it, take it apart, add to it, modify it. Within the decade, schizophrenia and psychotic depression will be history. That's how rapidly this knowledge is unfolding. We will have a cure and prevention of these within the decade. It doesn't mean we won't see schizophrenia in 2011, but the means of treating it will be there.

In the next couple of years, you're going to see overwhelming public and political acknowledgment that greenhouse warming is real. And we'll see massive programs that will affect home building and industrial processes—and with that, a movement to massive conservation.

We're going to see much more work at home. Companies will see that people going to work is a tremendous waste of resources. Your grandfather on the farm probably saw one person a week, and he didn't go crazy. It's just a social accident that in an urban world, you see people so often. Videoconference screens will be fine enough so that you can read people's body language.

Q. How else will life at home change?

A. You will see the "electronic home work-study center." You're going to have to have something set aside as a designated workplace — bigger homes. By the end of the decade, the typical home will have seven to eight flat-panel screens. Your cousin will be getting married in California, and you'll stick out your hand and touch the screen. It's not an alternative, either- or way of living. It's a substitution.

And who needs a \$25,000 automobile to drive 5,000 miles a year? Are you going to travel three miles to a McDonald's? You'll see the redistribution of the service sector. You'll see fast-food people coming into the neighborhood with kiosks selling 15 items.

Regarding the education of children, with the dreadful condition of K-12, several things will happen. Parents will protest, but it won't be very effective. Home schooling will grow. Some parents will augment what the school does; others will replace it. Distance learning has become very popular. College will eventually be the thing you go to only for hands-on experience or to find a mate. I see this rolling back into high school.

Q. Do you see any breakthroughs in how we consume energy, what we drive, what we wear?

A. We may see a significant number of fuel-cell automobile models over the next five years. I don't see hydrogen as a big factor in less than a dozen years. The people who wage war against nuclear power, that generation is aging and dying off. A new generation more favorable to nuclear energy will emerge.

You're going to have technology that provides "total body confirmation" — shapes, colors, size, style preferences — and all of this will be available to vendors. You will see a picture of yourself on the screen in the outfit, and can have the picture rotate so that you can see how the back looks. Say you're dealing with Nordstrom, and you want a warm-weather suit: "No. 12, that's great, do you have that in yellow?"

Q. What technologies give you the most confidence?

A. The overall introduction of more information technology, in the form of sensors, "actuators" and detectors. For example, by the end of the decade we will have automobiles that are totally robotic. You'll say: "Car, it's getting close to 3 — go pick up the kids. Then go pick up Harriet and go to Safeway."

Also, we're moving into an area of total body improvement. We'll have sweaters that tell you you're hunched over and won't stop until you stand up straight. If you're a diabetic, you'll have something buried in your belly or leg or other fat place that tells you: "Hey, Carol, you overdid it this time. Better take some more insulin." You'll be able to change your voice, your attitude, your interpersonal relations. No aspect will elude you.