

THE NEXT 30 YEARS

To celebrate our past 30 years, the WQ asked 10 thinkers to speculate about the next 30. Their predictions about the future of love, war, language, culture—even what we'll eat—provide food for thought.

Will We Still Be Fully Human?

By JOEL GARREAU

WE ARE AT A TURNING POINT IN HISTORY. FOR THE FIRST time, our technologies are not so much aimed outward at modifying our environment. Increasingly, they are aimed inward—at modifying our minds, memories, metabolisms, personalities, and progeny. If we can do that—not in some distant science-fiction future but in the next five, 10, 15 years—then are we not talking about altering what it means to be human?

Think of Barry Bonds, the baseball slugger implicated in the steroid scandal. We are already debating whether he should go into the record books as the same sort of human as the people whose records he broke. Now move out a few years. What happens if the 2008 Beijing Olympic Games feature genetically enhanced athletes dramatically different from their competitors, as some bioengineers matter-of-factly predict?

Our capabilities have been following paths of exponential change since the dawn of time. Biological evolution took millions of years to get from apes to hominids walking erect, usefully freeing up our hands. Cultural evolution

took 66 years to get from the first powered flight to walking on the moon. Now we have entered a third, engineered evolutionary phase—radical evolution, if you will.

In the last decade, we have become the first species to start directly altering and enhancing our intellectual and physical gifts. The amazing capabilities of our genetic, robotic, information, and nano processes—call them the GRIN technologies—are doubling every few months. All of the powers of our comic book superheroes from the 1930s and '40s are available or in development, from Superman's telescopic vision to the Shadow's ability to know what evil lurks in the hearts of men.

Bioconservatives such as Francis Fukuyama and Leon Kass of the President's Council on Bioethics view the familiar 1.0 version of human nature as providing stable continuity to our experience as a species, defining our most basic values. They make a principled case for continuing to experience anguish, decrepitude, and death. At the same time, their ideas as to how people might be convinced to avoid leaping to embrace the undeniable advantages conferred by the rapidly evolving GRIN technologies are not always persuasive.

The Pentagon's Defense Advanced Research Projects Agency is working on enhancing humans so that they can go seven days without sleep or food and not lose cognitive ability; display unlimited endurance; and regrow lost limbs the way tadpoles replace amputated tails. Five U.S. com-



Old Black Magic (1984), by Patrick Nagatani

panies are vying to produce, within three to five years, memory pills that might allow parents to buy an additional 200 points on their kids' SAT scores.

It may not be long before you run into a young lady so seriously modified that you might ask whether she represents a transcendence comparable to the difference between Neanderthals and today's humans. She might have a significantly transformed mind, memory, metabolism, and personality. You'd be curious whether this had changed her immortal soul.

When that day arrives, I propose the Shakespeare Test. You stick this object of curiosity into your hypothetical time machine and dial her back to 1603. You present her to the creator of both Othello and Caliban, who obviously knew something about human nature and humans' reactions to outsiders, and ask Mr. Shakespeare a simple question: "Do you recognize this creature as one of yours? Is she human?"

The deeper question is whether our GRIN technologies can alter the basics of the human condition. Can we imagine them changing the way we shape truth, beauty, love, or happiness? What if our thinking about what is attainable for humans is constrained by our narrow experience? Should we allow for the possibility that as we develop greater capacities, we will discover values that strike us as more profound than those we can realize now, including higher levels of moral excellence? After all, much of what we now consider natural is not necessarily desirable or morally good—cancer, malaria, dementia, aging, starvation, susceptibility to disease, murder, rape, racism.

In 1486, Giovanni Pico della Mirandola eloquently centered all attention on human capabilities in his manifesto of the Italian Renaissance, *Oration on the Dignity of Man*. In it, God says to Adam, "We give you no fixed place to live, no form that is peculiar to you, nor any function that is yours alone. According to your desires and judgment, you will have and possess whatever place to live, whatever form, and whatever functions you yourself choose."

We have been attempting to transcend the limits of human nature for a long time. We've tried Socratic reasoning and Buddhist enlightenment and Christian sanctification and Cartesian logic and the New Soviet Man. Our successes have ranged from mixed to limited, at best. Once again, we are trying to improve not just our world but our very selves.

Who knows? Maybe this time we'll get it right.

■ JOEL GARREAU is a reporter and editor at *The Washington Post* and the author most recently of *Radical Evolution: The Promise and Peril of Enhancing Our Minds, Our Bodies—and What It Means to Be Human* (2005).

Will American Culture Heal Itself?

By CAMILLE PAGLIA

I FORESEE NO RESOLUTION OVER THE NEXT 30 YEARS of the stalemate in American culture between religious conservatives and secular humanists, among whom I number myself. If there is any shift in power, it may well be toward the religious side. Muslim jihadists have forced a confrontation with Western culture, which they portray as irredeemably corrupt, from its callous materialism to its empty hedonism. Unfortunately, from my perspective, the most vigorous defenders of the West against this challenge have come from the right wing, where there is equal rejection of the 1960s legacy of theatrical individualism and unfettered sexual freedom.

Religion has been intrinsic to American culture since the immigration of Puritan dissidents. No force was strong enough to combat it until the rise of Hollywood, the new Babylon, in the early 20th century. I have celebrated Hollywood as an eruption of the West's buried paganism. But now the entertainment industry, which once drew from a vibrant milieu of popular performance (vaudeville, variety shows, operetta, musical comedy), has become a manic world unto itself—the only culture, aside from high-tech gadgetry, that young people know. In current movies, for example, there is an overreliance on glitzy special effects and dizzily rapid cutting, accompanied by neglect of basic matters of character, motivation, and setting. I am pessimistic about the ability of Hollywood to recover its creativity: Market forces are too strong (because of the staggering profits from world distribution), and studio decision-making is dominated by risk-averse corporate values.

The only answer to the competing tyrannies of religion and Hollywood is art. But art has never taken deep root in the United States; there is little sense that art represents the cultural heritage of the nation, as it does in Europe. The United States, which is still relatively young, began as a frontier society pragmatically focused on the future. Art was a luxury and frivolity. Fundamentalist Protestantism also discouraged image making on biblical grounds. Even today, art remains a minority interest. It has been a struggle in recent decades to defend even modest federal arts funding, a situation worsened by a series of bitter controversies over contemporary artworks of antireligious or pornographic content.