

**THE TALK OF THE TOWN**

**COMMENT: SCIENCE FICTION**

**By: Jerome Groopman**

The future of the life sciences in America may depend, in some small part, on the opinions of a bioethicist named Dr. Leon R. Kass. Kass, who was trained as a physician, is now a scholar at the American Enterprise Institute, on leave from the University of Chicago's Committee on Social Thought. He has devoted a book to "eating and the perfecting of our nature," and has contributed to books with titles like "The Neoconservative Imagination." In August, President Bush appointed him chairman of the new National Bioethics Commission, which the President has asked to be "the conscience of our country" and be his guide on all ethical matters relating to biomedical advances.

At the commission's first meeting, the other week in Washington, Kass opened a discussion not with facts but with fiction. He talked about Nathaniel Hawthorne's tale "The Birthmark," in which a brilliant scientist marries a woman whose extraordinary beauty is marred only by a blemish on her cheek and becomes obsessed with eliminating the imperfection. The story has all the gothic conventions: bubbling beakers, arcane tomes, elixirs of immortality, a stunted, ape-like assistant. In the end, the scientist's treatment cures the blemish but kills the wife.

Using literature to warn against the scientific search for perfection is a hallmark of Kass's approach to bioethics. (Hawthorne, Homer, and Huxley are among his touchstones.) So is a reflexive suspicion toward the enterprise of biotechnology. In a series of essays published in the nineteen-seventies, Kass opposed what is now the commonplace practice of in-vitro fertilization. He worried that it could erode traditional marriage and create a baby market, and that children conceived by the process would be stigmatized. (He has since dropped the subject.) Last summer, Kass came to public notice when he advised President Bush on his decision to prohibit the creation of any new stem-cell lines derived from human embryos. Now Kass's commission is deliberating stem-cell research as the Senate begins debate on several bills on human cloning.

There are two types of human cloning, popularly called reproductive and therapeutic. In both types, a nucleus from a cell is inserted into an unfertilized egg, and the egg takes on that cell's genetic characteristics. In reproductive cloning, the manipulated egg would grow to be a baby that is a genetic copy of the donor. In therapeutic cloning, the manipulated egg grows into a microscopic clump, which provides primitive stem cells, and the process is terminated. Cloned stem cells may one day provide treatments for scores of currently incurable diseases, including juvenile diabetes, Parkinson's, Alzheimer's, and spinal-cord paralysis. As the Kass commission

met, the National Academy of Sciences, the most august research organization in American science -- and one that was also created to advise the federal government -- issued a report that called for a ban on reproductive cloning but reaffirmed its support for research on therapeutic cloning.

Unfortunately, the scientific consensus isn't accompanied by a political one. The President opposes all cloning -- he told the bioethics commission, "I just don't think it's right" -- and Kass has taken a similar position. In a 1998 book, "The Ethics of Human Cloning," he warns that even therapeutic cloning may lead us into a world where science is used for "replicating individuals of great genius, talent, or beauty" or creating "genetically identical humans suitable for research" or for "special missions in peace and war (not excluding espionage)."

Kass's vision is dismally remote from what actually goes on in the nation's laboratories. There are no wild-eyed wizards with perfection potions. Instead, medical scientists stare at diseases against which frustratingly little progress has been made, despite years of dedicated research. While Kass conjures a world of lab-bred James Bonds, two hundred thousand Americans live with spinal-cord injuries, a million and a half have Parkinson's, and four million have Alzheimer's.

How does Kass defend his hostility toward stem-cell research and cloning? With a doctrine that he calls "the wisdom of repugnance," and which states, basically, that if you find something repugnant—if you just don't think it's right -- then it must be wrong. The problem with this argument is that it is impervious to reason and severely constrained by time and place. Whether repugnance really offers wisdom depends, of course, on what you find repugnant. The practice of autopsy, which made modern medicine possible, was for centuries widely considered repugnant. More recently, in 1976, the city of Cambridge, Massachusetts, decided that recombinant-DNA technology was repugnant, and it called for a moratorium on the cloning of genes at institutions such as Harvard and M.I.T. This research became the basis of modern biotechnology. If Cambridge's distaste had been sustained, or shared by San Francisco, we would have been denied many of our most important treatments for cancer, rheumatoid arthritis, and heart disease.

There is, however, a tactical advantage in applying the wisdom of repugnance to the stem-cell debate, in that it skirts the familiar theological argument that a manipulated egg is a human life. It therefore enables the Bush Administration to accommodate the religious right without openly embracing its fundamentalism.

The commission is due to meet a few more times and to publish its proposals by the summer. Its critics have noted that most of the eighteen members are conservatives like Kass who are unlikely to recommend anything that the President would not want to hear. One has to hope that the few working scientists on the commission, such as Dr. Janet D. Rowley, a leukemia expert who is also a member of the National Academy of Sciences, can help shape a medical guideline that is based on fact, not on literature or aesthetics -- one that distinguishes real science from science fiction.