

men sell children a video game called "Road Rash," in which the player assumes the role of a criminal biker to commit "aggravated assault," "hit and run driving," and "assault against a police officer." The Electronic Arts child customer seeks to help his alter-ego, on the motorcycle, smashing with a club at a policeman who is riding next to him. The child then plots to break the arrested character, named "Spaz," out of jail.

This game is actually certified "T" for "Teen."

On the Edge

Speculators who previously drove up share prices for producers of satanic video games have recently been dumping them, placing these enterprises into a potentially vulnerable position.

The stock of Midway Games has lost more than two-thirds

of its market value in the last four months. In December 1999, when the Chicago City Council gave the company a \$2 million bribe, Midway's stock traded at about \$24 a share. At the close of trading on April 24, the price was \$6.19. Acclaim dropped from around \$8 a share last October, to \$2.66 as of April 24. Activision fell from about \$17 a share in February, to \$6.56. Electronic Arts is down from about \$120 a share in December, to about \$53. Hasbro reached over \$36 a share a year ago, but had slid to \$15.75 by April 24.

In the coming days of turmoil and the withdrawal of their financial base, the weaker among these organizations will be close to collapse. They claim, "It's not a righteous way of life, but we all have to make a living. Even if it means making a killing." Now that their living is threatened, this is a particularly fine time for coordinated citizen action to close them down.

From Cybernetics to Littleton: Techniques of Mind Control

by Jeffrey Steinberg

The \$9 billion a year video-game industry in America, which contributed mightily to the carnage at Littleton, Paducah, and Jonesboro, is far more than the mere commercial exploitation of techniques and technologies developed as "legitimate" training instruments for the military and law enforcement agencies. To understand the roots of this new form of "Manchurian Candidate" programmed terrorism, it is necessary to go back to World War II and the immediate postwar period, when there was a concerted effort launched, by the Frankfurt School and the London Tavistock Institute, to use the Marxist/Freudian perversion of psychology and other social sciences, as instruments for mass social control and brainwashing. The two pillars of the assault on the American intellectual tradition were cybernetics and the drug counterculture.

At that time, a number of prominent social scientists openly spelled out their goal, of using the wartime-tested techniques of mass psychological manipulation, to pervert and control the American people. And in most instances, their emphasis was on children, and the need to destroy the fabric of family life.

Lord Bertrand Russell, who joined with the Frankfurt School in this effort at mass social engineering, spilled the beans, in his 1951 book, *The Impact of Science on Society*. He wrote:

"Physiology and psychology afford fields for scientific technique which still await development. Two great men, Pavlov and Freud, have laid the foundation. I do not accept the view that they are in any essential conflict, but what structure will be built on their foundations is still in doubt. I think the subject which will be of most importance politically is mass psychology. . . . Its importance has been enormously increased by the growth of modern methods of propaganda. Of these the most influential is what is called 'education.' Religion plays a part, though a diminishing one; the press, the cinema, and the radio play an increasing part. . . . It may be hoped that in time anybody will be able to persuade anybody of anything if he can catch the patient young and is provided by the State with money and equipment."

Russell continued, "The subject will make great strides when it is taken up by scientists under a scientific dictatorship. . . . The social psychologists of the future will have a number of classes of school children on whom they will try different methods of producing an unshakable conviction that snow is black. Various results will soon be arrived at. First, that the influence of home is obstructive. Second, that not much can be done unless indoctrination begins before the age of ten. Third, that verses set to music and repeatedly intoned are very effective. Fourth, that the opinion that snow is white must be

held to show a morbid taste for eccentricity. But I anticipate. It is for future scientists to make these maxims precise and discover exactly how much it costs per head to make children believe that snow is black, and how much less it would cost to make them believe it is dark gray.”

Russell concluded with a warning: “Although this science will be diligently studied, it will be rigidly confined to the governing class. The populace will not be allowed to know how its convictions were generated. When the technique has been perfected, every government that has been in charge of education for a generation will be able to control its subjects securely without the need of armies or policemen.”

Russell and the ‘Lethal Chamber’

Russell had been working on the concept of the scientific dictatorship for decades. In his 1931 book, *The Scientific Outlook*, he had devoted a chapter to “Education in a Scientific Society.” Here, he was equally blunt about his oligarchical totalitarian vision. Drawing the parallel to the two levels of education provided by the Jesuits, Russell asserted: “In like manner, the scientific rulers will provide one kind of education for ordinary men and women, and another for those who are to become holders of scientific power. Ordinary men and women will be expected to be docile, industrious, punctual, thoughtless, and contented. Of these qualities probably contentment will be considered the most important. In order to produce it, all the researches of psycho-analysis, behaviourism, and biochemistry will be brought into play. . . . All the boys and girls will learn from an early age to be what is called ‘co-operative,’ i.e., to do exactly what everybody is doing. Initiative will be discouraged in these children, and insubordination, without being punished, will be scientifically trained out of them.”

For the children chosen to be among the scientific ruling class, education was to be quite different. “Except for the one matter of loyalty to the world State and to their own order,” Russell explained, “members of the governing class will be encouraged to be adventurous and full of initiative. It will be recognized that it is their business to improve scientific technique, and to keep the manual workers contented by means of continual new amusements.”

Russell, however, added one very strong caveat. “On those rare occasions,” he warned, “when a boy or girl who has passed the age at which it is usual to determine social status shows such marked ability as to seem the intellectual equal of the rulers, a difficult situation will arise, requiring serious consideration. If the youth is content to abandon his previous associates and to throw in his lot whole-heartedly with the rulers, he may, after suitable tests, be promoted, but if he shows any regrettable solidarity with his previous associates, the rulers will reluctantly conclude that there is nothing to be done with him except to send him to the lethal chamber before his ill-disciplined intelligence has had time

to spread revolt. This will be a painful duty to the rulers, but I think they will not shrink from performing it.”

Huxley’s ‘Concentration Camp of the Mind’

Russell’s blunt description of a “scientific dictatorship” was matched by the account of Aldous Huxley, author of the utopian tract *Brave New World*, in a speech on the U.S. State Department’s Voice of America, in 1961, of a world of pharmacologically manipulated slaves, living in a “concentration camp of the mind,” enhanced by propaganda and psychotropic drugs, learning to “love their servitude,” and abandoning all will to resist. “This,” Huxley concluded, “is the final revolution.”

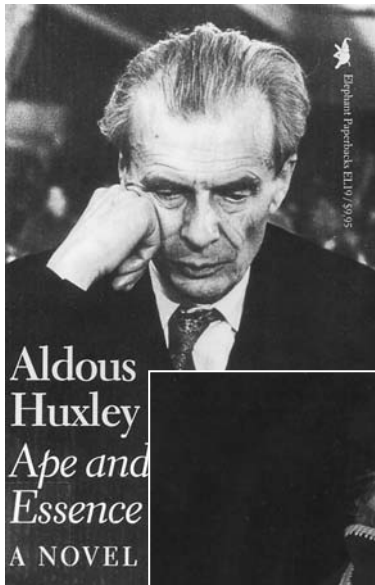
Speaking at the California Medical School in San Francisco, Huxley announced: “There will be in the next generation or so a pharmacological method of making people love their servitude and producing dictatorship without tears, so to speak. Producing a kind of painless concentration camp for entire societies so that people will in fact have their liberties taken away from them but will rather enjoy it, because they will be distracted from any desire to rebel by propaganda, or brainwashing, or brainwashing enhanced by pharmacological methods. And this seems to be the final revolution.”

Huxley’s cohort in the 1950s experimentation with psychotropic drugs, Dr. Timothy Leary, of Harvard University’s Psychology Department, provided another glimpse into the perverted minds of the Russell/Huxley/Frankfurt School crowd, in his autobiographical account of the Harvard University Psychedelic Drug Project, *Flashback*. Leary quoted Huxley: “These brain drugs, mass produced in the laboratories, will bring about vast changes in society. This will happen with or without you or me. All we can do is spread the word. The obstacle to this evolution, Timothy, is the Bible.” Leary then added: “We had run up against the Judeo-Christian commitment to one God, one religion, one reality, that has cursed Europe for centuries and America since our founding days. Drugs that open the mind to multiple realities inevitably lead to a polytheistic view of the universe. We sensed that the time for a new humanist religion based on intelligence, good-natured pluralism and scientific paganism had arrived.”

As these monstrous notions of mass social engineering were being presented as the “humanistic” alternative to world war in the age of the atomic and hydrogen bomb, two crucial projects were being launched, that would shape the implementation of this Brave New World, and bring us, today, to the world of Littleton, Paducah, Jonesboro, Doom, Quake, and Duke Nukem.

The Authoritarian Personality

The first of the two projects was launched in January 1943, by a team of three social psychologists at the University of California at Berkeley, Else Frenkel-Brunswik (a founding member of the Frankfurt Institute for Social Research, known



Among the creators of the techniques of mind control that led to the current explosion of programmed violence (clockwise from left): Margaret Mead, Aldous Huxley, John von Neumann, Bertrand Russell.

as the “Frankfurt School”), Daniel J. Levinson, and R. Nevitt Sanford. What started out as a modest \$500 grant to study the roots of anti-Semitism, would soon mushroom into the biggest mass social-profiling project ever undertaken in America, up until that time.

In May 1944, the American Jewish Committee established a Department of Scientific Research, which was headed by Frankfurt School director Max Horkheimer. Horkheimer established a project, called Studies in Prejudice, with generous funding from the AJC and other agencies, including the Rockefeller foundations. The Studies in Prejudice offered employment to a number of Frankfurt School members who, for various reasons, were not coopted directly into the war effort (for example, Herbert Marcuse and Franz Neumann were brought into the Research and Analysis Section of the Office of Strategic Services, or OSS, the forerunner to today’s Central Intelligence Agency). Hedda Massing, Marie Jahoda, Morris Janowitz, and Theodor W. Adorno all worked on the Studies, and, under Horkheimer’s direction, they all formally reconstituted the International Institute of Social Research, the transplanted incarnation of the original Frankfurt School of Weimar Germany.

The most significant of the five Studies in Prejudice, produced for the AJC during 1944-50, was *The Authoritarian*

Personality (New York: Harper, 1950). Authors Adorno, Frenkel-Brunswick, Levinson, and Sanford assembled a large research team from the Berkeley Public Opinion Study and the International Institute of Social Research, to conduct thousands of interviews of Americans, to profile their allegedly deep-seated tendencies toward authoritarianism, prejudice, and anti-Semitism. Dr. William Morrow, the leading protégé of Dr. Kurt Lewin, who was one key, bridge figure between the Frankfurt School and the Tavistock Institute, was a research director for the Authoritarian Personality project.

The study was an exercise in self-fulfilling prophecy and Marxist/Freudian self-delusion. Long before the first survey questionnaire was drafted, Horkheimer and Adorno had written exhaustively about the “authoritarian” character of the American nuclear family, about the “problem” of the American people’s belief in a transcendent monotheistic God, and about the underlying fascist character of all forms of American patriotism. They “cooked” the survey data, in advance, by devising a series of scales, purporting to measure the American population’s tendency toward anti-Semitism, ethnocentricity, anti-democratic ideology, and, ultimately, fascism. Not surprisingly, the research team found the American public “guilty as charged,” and produced dire warnings that, unless a dramatic overhaul of the American ideology and

mass culture were carried out, America would soon emerge as a Fourth Reich, repeating the horrors of Hitler on an even grander scale.

The authors of *The Authoritarian Personality* let it all hang out in the concluding chapter of the book, in which they summarized their findings and spelled out their recipe for social transformation:

“It seems obvious, that the modification of the potentially fascist structure cannot be achieved by psychological means alone. The task is comparable to that of eliminating neurosis, or delinquency, or nationalism from the world. These are products of the total organization of society and are to be changed only as that society is changed. It is not for the psychologist to say how such changes are to be brought about. The problem is one which requires the efforts of all social scientists. All that we would insist upon is that in the councils or round tables where the problem is considered and action planned the psychologist should have a voice. We believe that the scientific understanding of society must include an understanding of what it does to people, and that it is possible to have social reforms, even broad and sweeping ones, which though desirable in their own right would not necessarily change the structure of the prejudiced personality. For the fascist potential to change, or even to be held in check, there must be an increase in people’s capacity to see themselves and to be themselves. This cannot be achieved by the manipulation of people, however well grounded in modern psychology the devices of manipulation might be. . . . It is here that psychology may play its most important role. Techniques for overcoming resistance, developed mainly in the field of individual psychotherapy, can be improved and adapted for use with groups and even for use on a mass scale.”

The authors conclude with this most revealing proposition: “We need not suppose that appeal to emotion belongs to those who strive in the direction of fascism, while democratic propaganda must limit itself to reason and restraint. If fear and destructiveness are the major emotional sources of fascism, *eros* belongs mainly to democracy.”

Eros was precisely the weapon that the Frankfurt School and their fellow-travellers employed, over the next 50 years, to create a cultural paradigm shift away from the so-called “authoritarian” matrix of man in the living image of God (*imago viva Dei*), the sanctity of the nuclear family, and the superiority of the republican form of nation-state over all other forms of political organization. They transformed American culture toward an erotic, perverse matrix, associated with the present “politically correct” tyranny of tolerance for dehumanizing drug abuse, sexual perversion, and the glorification of violence. For the Marxist/Freudian revolutionaries of the Frankfurt School, the ultimate antidote to the hated Western Judeo-Christian civilization was to tear that civilization down, from the inside, by turning out generations of necrophiliacs.

If this statement seems harsh, consider the following. In

his 1948 work on *The Philosophy of Modern Music*, Frankfurt School leader Theodor Adorno argued that the purpose of modern music is to literally drive the listener insane. He justified this by asserting that modern society was a hotbed of evil, authoritarianism, and potential fascism, and that, only by first destroying civilization, through the spread of all forms of cultural pessimism and perversity, could liberation occur. On the role of modern music, he wrote, “It is not that schizophrenia is directly expressed therein; but the music imprints upon itself an attitude similar to that of the mentally ill. The individual brings about his own disintegration. . . . He imagines the fulfillment of the promise through magic, but nonetheless within the realm of immediate actuality. . . . Its concern is to dominate schizophrenic traits through the aesthetic consciousness. In so doing, it would hope to vindicate insanity as true health.” Necrophilia, he added, is the ultimate expression of “true health” in this sick society.

Erich Fromm, another leading Frankfurt School figure, who was instrumental as early as the 1930s in devising the scales used in the Authoritarian Personality study, devoted much of his seminal 1972 work, *The Anatomy of Human Destructiveness*, to the analysis of necrophilia, which he pronounced to be the dominant trend in modern society. Fromm defined necrophilia as all forms of obsession with death and destruction, particularly those with intense sexual overtones. Ironically, his ostensible “cure” for this mass social perversion was the drug, rock, sex counterculture of the late 1960s. “Simultaneously with the increasing necrophilous development,” Fromm wrote in his chapter on “Malignant Aggression: Necrophilia,” “the opposite trend, that of love of life, is also developing. It manifests itself in many forms: in the protest against the deadening of life, a protest by people among all social strata and age groups, but particularly by the young. There is hope in the rising protest against pollution and war. . . . This protest is also to be understood in the attraction to drugs among the young.”

Liberation through Drug Abuse

It is noteworthy that one of the four directors of the Authoritarian Personality project, R. Nevitt Sanford, played a pivotal role in the 1950s and ’60s experimentation and eventual mass usage of psychedelic drugs. In 1965, Sanford wrote the forward to *Utopiates: The Use and Users of LSD 25*, which was published by Tavistock Publications, the publishing arm of Great Britain’s pre-eminent psychological warfare agency, the Tavistock Institute. Tavistock directed the Psychiatric Division of the British Army during World War II, and dispatched many of its top brainwashers to the United States in the immediate postwar period, to work on the secret mind-control projects of the CIA and the Pentagon, including the MK-Ultra project, devoted to the study of LSD and other psychedelics.

In his foreword to *Utopiates*, Sanford, who headed up the Stanford University Institute for the Study of Human Prob-

lems, a major outpost for MK-Ultra secret LSD experimentation, spelled out the argument for drug legalization that is, to this day, at the heart of the pro-drug movement's propaganda. "The nation," Sanford wrote, "seems to be fascinated by our 40,000 or so drug addicts who are seen as alarmingly wayward people who must be curbed at all costs by expensive police activity. Only an uneasy Puritanism could support the practice of focusing on the drug addicts (rather than our 5 million alcoholics) and treating them as a police problem instead of a medical one, while suppressing harmless drugs such as marijuana and peyote along with the dangerous ones." The leading propagandists of the drug lobby today—George Soros, Ethan Nadelman, et al.—base their argument for legalization on the exact same scientific quackery that Dr. Sanford spelled out in *Utopiates* 36 years ago.

The Cybernetics Group

One of the "Big Lies" permeating Fromm's *Anatomy* was the idea that the erotic drug-rock-sex counterculture was the antidote to the cybernetic, technetronic "necrophilous" society. In reality, the Frankfurt School and their closest allies among the Russell/Wells/Huxley British oligarchy, were the architects of both the cybernetics project and the counterculture project of the 1960s. In fact, the Cybernetics Group, sponsored by the Josiah Macy Foundation, was the umbrella, under which the CIA and British intelligence conducted their mass experimentation with mind-altering psychedelic drugs, including LSD-25, which experiment was, eventually, spilled out onto the streets of San Francisco, New York's Greenwich Village, and every American college campus, giving us the counterculture "paradigm shift" of 1966-72.

The Cybernetics Group, known among its members as the "Man-Machine Project," was unofficially launched in May 1942 at a New York City conference called the Cerebral Inhibition Meeting, sponsored by the medical director of the Josiah Macy Foundation, Frank Fremont-Smith. Among the participants were Warren McCulloch, Arturo Rosenblueth, Gregory Bateson, Margaret Mead, and Lawrence K. Frank. Rosenblueth, a protégé of Norbert Wiener, set out the broad parameters of the proposed effort. Speaking on behalf of Wiener and John von Neumann, he proposed to draw together a group of engineers, biologists, neurologists, anthropologists, and psychologists, to devise experiments in social control, based on the quack claim that the human brain was nothing more than a complex input/output machine, and that human behavior could, in effect, be programmed, on both an individual and societal scale.¹

World War II prevented the project from getting off the ground for four years. But shortly after the Japanese surrendered, McCulloch asked Fremont-Smith to convene a second gathering under the formal sponsorship of the Macy Founda-

tion. The first of what would be a series of ten major conferences and year-long research efforts, between 1946 and 1953, took place in New York City on March 8-9, 1946, under the title, "The Feedback Mechanisms and Circular Causal Systems in Biology and the Social Sciences Meeting."

What came out of that first meeting was not only a demonic drive to create the ultimate engineered society, based on the fusion of man and machine. A core group of 20 people constituted themselves as a task force to carry out this mission, and would spawn a series of permanent institutions, where the work would continue, to the present day. A year after the founding session of the Macy project, Wiener would coin the term "cybernetics" to describe their effort.

Who were the "Dr. Jekylls" gathered around the table for the first of the Macy conferences?

Warren McCulloch was the titular chairman of all ten of the conferences. At the time of the first meeting, he was a professor of psychiatry and physiology at the University of Illinois, but he would soon move to the Research Laboratory of Electronics at MIT.

Walter Pitts, McCulloch's protégé, first at Illinois, and later at MIT.

Gregory Bateson, the anthropologist and then-spouse of Margaret Mead, who would soon become the director of research at the Veterans Hospital in Palo Alto, California, where he was a pivotal player in MK-Ultra and other secret government experiments with mind-altering drugs.

Margaret Mead, then the assistant curator of ethnology at the American Museum of Natural History in New York, who would function as the "earth goddess" of the Cybernetics Group, and would help launch the modern feminist movement, through her patronage of Betty Friedan, a student-protégé of Kurt Lewin.

Kurt Lewin, founder of the Research Center for Group Dynamics at MIT, a leading Frankfurt School fellow-traveler, whose work with Frankfurt School founder Karl Korsch on linguistics would form a foundation of the field of Artificial Intelligence (AI). Lewin's National Training Laboratory would later become part of the National Education Association, and would facilitate the transformation of public education in America into an approximation of Bertrand Russell's nightmarish scheme for teaching children that "snow is black."

Paul Lazarsfeld, the director of the Bureau of Applied Social Research at Columbia University, who had been the wartime head of the Radio Research Laboratory at Princeton University, and had been the patron there of the Frankfurt School's Theodor Adorno.

John Von Neumann.

Norbert Wiener.

An incredible collection of guests attended the Cybernetics Group sessions during their seven years of existence. Among them were **Max Horkheimer**, the head of the Frankfurt School, who collaborated with the Cybernetics Group,

1. See Lyndon H. LaRouche, Jr., "Information Society: A Doomed Empire of Evil," *EIR*, April 28, 2000.

while directing the Studies in Prejudice.

Dr. Harold Abramson, one of the CIA's top scientists engaged in the secret LSD experimentation, not only attended the Sixth Cybernetics Group conference, but worked with **Dr. Frank Fremont-Smith**, the research director of the Macy Foundation, on a series of spinoff conferences, where all of the top personnel of MK-Ultra were able to convene under Macy Foundation cover and finances, to plot out their mass drugging of America.

In return, Abramson dutifully provided Fremont-Smith with ample personal supplies of LSD-25.

The Macy Foundation also provided financing and publicity for the British social engineer **Dr. William Sargant**, whose 1957 book, *Battle for the Mind*, provided a "how-to-do-it" manual for mass brainwashing. Sargant spent 20 years in the United States, working on the MK-Ultra project and other secret mind-control efforts of the U.S. and British governments.

Among the nastiest of the projects launched by the Cybernetics Group was the World Federation of Mental Health (WFMH), whose first president, **Brig. Gen. John Rawlings Rees**, was the director of the Tavistock Institute, Britain's premier psychological warfare center.

Rees, Mead, Lawrence K. Frank, Fremont-Smith and Horkheimer were all in Paris together, in the summer of 1948, to launch the WFMH. Although he had died the previous year, Kurt Lewin had been involved in the preparations for launching the Federation, through his involvement, under Frank, in the National Committee for Mental Hygiene, and the London-centered International Committee for Mental Hygiene, with a half-dozen Cybernetics Group members on its board. Both bodies oversaw a network of over 4,000 "psychiatric shock troops," in Rees's words, who would be at the heart of a worldwide social-engineering apparatus, penetrated into every community.

Margaret Mead and Lawrence K. Frank, two pillars of the Cybernetics Group, authored the founding statement of Rees's World Federation of Mental Health (both Mead and Frank would later succeed Rees as president), which they titled, "Manifesto of the First International." Mead and Frank bluntly wrote: "The goal of mental health has been enlarged from the concern for the development of healthy personalities to the larger tasks of creating a healthy society. . . . The concept of mental health is co-extensive with world order and world community." Frank even proposed to create a new religion of mental health.

Computers and Artificial Intelligence

For John von Neumann and Norbert Wiener, the core of the Cybernetics Group project was the development of computers, and the prospect of combining high-speed computers with so-called Artificial Intelligence, to literally "program" the human race. Underlying all of these efforts was the unshakable, albeit preposterous conviction, most avidly

presented by von Neumann, that there was nothing sacred about the human mind, and that the human brain was a machine, whose functioning could be replicated, and eventually surpassed, by computers.

Dr. Jerome Wiesner, the president of MIT, which became the closest thing to the home of the Cybernetics Group, participated in several of the Macy Foundation sessions. He clearly stated this Luciferian view of man, in an interview with counterculture propagandist Stewart Brand, which appeared in Brand's 1987 book, *The Media Lab: Inventing the Future at M.I.T.*:

"I'm not arrogant enough to think that we're going to develop real thinking machines in a short time. But nerve signals travel at 300 meters a second. Electrical signals travel at . . . 300 million meters a second. Also the components we make are much more reliable than neurons. . . . The higher degree of reliability of the components and the very much higher degree of speed of the impulses means to me you ought to be able to make machines that are just a hell of a lot better than the brain, if you knew how to do it."

Brand asked Wiesner, "You expect that?"

Wiesner: "Yeah, not necessarily in my lifetime. No one has given a reason why it can't be done. They make all kinds of crazy arguments — 'A computer doesn't have a soul.' How do we know that it won't have the same soul that we do? After all, humans will program it. I don't think questions about identity are very interesting."

Dr. Wiesner not only participated in the Cybernetics Group efforts of the Macy Foundation. In 1952, he took over the directorship of the Research Laboratory of Electronics at MIT, where Wiener, McCulloch, and Pitts had all taken up residence. Soon, the RLE had spun off the Artificial Intelligence Lab, with Dr. Seymour Papert and Marvin Minsky taking up the task of programming human behavior and interaction.

By the 1980s, MIT had spawned the Media Lab, another direct outgrowth of the 1940s and 50s Cybernetics Group. Here, the social engineers worked hand in glove with the engineers and machine designers who were developing high-speed computers, computer graphics, holographics, and the first generation of computer simulators. Much of the work at MIT, and at the Artificial Intelligence labs at Stanford University in Palo Alto, California, was funded through the Pentagon's Defense Advanced Research Projects Agency (DARPA).

Steve Joshua Heims, the author of the semi-official history of the Macy conferences on cybernetics, *The Cybernetics Group*, reported that, by the 1980s, the cybernetics crowd had even spawned their own religion—an overtly pagan belief-system remarkably in keeping with Timothy Leary's call for a "scientific paganism." "James Lovelock and Lynn Margulis," Heims wrote, "have examined how life—plants, animals, microorganisms—has influenced the chemistry of the atmosphere and the climate, and how life and climate have coe-

volved. Lovelock's Gaia hypothesis, which relies on a detailed cybernetic analysis, contends that all life on earth acts in concert with the atmosphere to make one self-regulating system that keeps the earth a liveable habitat." Heims did admit, "The validity of the Gaia hypothesis is currently the subject of scientific controversy."

Heims was far less guarded in his embrace of the work of the Media Lab, and the fact that the Media Lab was a direct outgrowth of the Macy Cybernetics project.

"McCulloch's and Pitts' 1943 approach to understanding mind and brain has had enthusiastic successors in the 1980s," he wrote. "Consider next the new, transdisciplinary Media Lab instituted at MIT in the 1980s. Onetime Macy participant Jerome Wiesner (who was close to McCulloch, Pitts and Wiener), Seymour Papert and Marvin Minsky (important figures in the history of the artificial intelligence approach to mind and brain), are lab associates. . . . According to the initial proposal the lab was to provide for 'the intellectual mix of two rapidly evolving and very different fields; information technologies and the human sciences'. . . . It deals with improvements in high-definition TV, satellite communications, fiber-optic cable TV, three-dimensional imaging, and data-compression to permit inexpensive transfers of full-length color film to a compact disk."

LSD Freaks Meet Cyber-Hackers

In 1974, Stewart Brand, chief propagandist for both the psychotropic drug revolution and the personal computer revolution, published a collection of his previously published essays under the title, *II Cybernetic Frontiers*. Two of the essays consisted of interviews he had conducted with Gregory Bateson, one of the architects of the psychedelic revolution in America, through his posting at the Palo Alto Veterans Hospital, where much MK-Ultra experimentation took place. Bateson was one of the four or five most influential members of the Cybernetics Group. The other, longer essay in the book, "Fanatic Life and Symbolic Death Among the Computer Bums," was first published in the December 1972 issue of the leading counterculture publication, *Rolling Stone*.

Brand began the *Rolling Stone* piece with the startling boast: "Ready or not, computers are coming to the people. That's good news, maybe the best since psychedelics." He continued, "It's way off the track of the 'Computers—Threat or Menace?' school of liberal criticism but surprisingly in line with the romantic fantasies of the fore-fathers of the science, such as Norbert Wiener, Warren McCulloch, J.C.R. Licklider, John von Neumann, and Vannevar Bush. The trend owes its health to an odd array of influences: the youthful fervor and firm dis-Establishmentarianism of the freaks who design computer science; an astonishingly enlightened research program from the very top of the Defense Department; an unexpected market-flanking movement by the manufacturers of small calculating machines; and an irrepressible mid-night phenomenon known as Spacewar."

Brand provided a detailed explanation of Spacewar, perhaps the very first computer war game to be designed. "Ah, Spacewar. Reliably, at any night-time moment (i.e., non-business hours) in North America, hundreds of computer technicians are effectively out of their bodies, computer-projected onto cathode ray tube display screens, locked in life-or-death space combat for hours at a time, ruining their eyes, numbing their fingers in frenzied mashing of control buttons, joyously slaying their friends and wasting their employers' valuable computer time."

If this sounds like a mild version of the latter-day souped-up sex and violence video games of today—it is!

Beginning in 1963, when the U.S. space program was moved out of the military and housed under NASA, J.C.R. Licklider convinced his boss at ARPA (what would later be called DARPA) to devote a fraction of the agency's budget to computer research. At the time, the Department of Defense was the world's largest consumer of computers. Licklider became the director of an ARPA unit called IPTO (Information Processing Techniques Office), and, over the next years, disbursed millions of dollars to a wide range of computer and Artificial Intelligence research centers.

Until 1969, when the Mansfield Amendment placed restrictions on how the Pentagon could spend its research and development money, there were no boundary conditions on the kinds of projects that IPTO could bankroll. Billions of dollars went into the early development of computer networking, computer graphics, "virtual reality," simulation, and other key facets of what, today, is a \$9-11 billion-a-year commercial industry of point-and-shoot video games. The Media Lab at MIT and the Stanford Artificial Intelligence Lab were two of the magnets for this money and the research work which fueled both the Pentagon training-simulation programs and the evolving video-game industry.

In his book *On Killing*, Lt. Col. David Grossman recounts how the advent of high-speed computers allowed the social engineers, responsible for training soldiers to overcome their aversion to killing, provided an unsurpassed technology for stimulus-response behavior modification. The increasingly realistic video graphics, the advanced work on neurological processes—all hallmarks of the cybernetic "man-machine" project—transformed the U.S. military into a force of programmed killers, and ultimately became the social engineers' "weapon of choice" for twisting the minds of millions of America's youth.

The social engineers seeking to fulfill Adorno, Horkheimer, Russell, and Huxley's visions of a perfectly engineered society, led by a "scientific dictatorship," were never far removed from the computer and AI labs where the technologies were being developed and tested. It was only a matter of time that, like the LSD experiments of the 1960s, the secret military experimental phase ended, and the American population became the targets, this time, of the sex and violence self-programming of Doom, Quake, and the rest.