

The Search for a Solution to the World Crisis

Victor Ferkiss's new book, *The Future of Technological Civilization*, argues that current ideologies cannot possibly cope with the crisis now gripping the world. But Ferkiss believes that mankind can survive the crisis through an "immanent revolution" that will involve a radical restructuring of our society. The best hope, Ferkiss feels, lies in the use of holistic methods and a new ideology that he calls "ecological humanism."

THE FUTURIST here presents two reviews of Ferkiss's book, followed by comments from the author. The first reviewer, Carroll Quigley, Professor of History at Georgetown University, believes that Ferkiss is essentially right in his analysis but fears that attempts to solve the problem may fail because there are too few people able and willing to take on the task.

✓ by Carroll Quigley

I am frequently asked, "How is it that the United States could put men on the moon, but cannot solve any of its major problems here on earth?" My answer is usually lengthy, pointing out that landing men on the moon was a straight, reductionist, engineering job in which (1) the problem could be isolated from its social and non-physical context; (2) it could be divided into numerable factors; (3) each factor could be quantified within acceptable margins of error; and (4) all costs could be quantified in monetary values.

Such a method is well suited to dealing with 19th-century physical problems. But problems on earth today are not physical and arise in a world of continua pervaded with values and with non-rational and non-physical forces. Such problems cannot be isolated and the factors involved are neither numerable nor quantifiable. Yet we still try to deal with these problems by using "experts" who are narrowly trained in the re-

ductionist techniques and thinking patterns of 19th-century methodology even when they are dealing with social and psychological problems which are in no way similar to "moon shots". Twentieth-century problems cannot be solved until 19th-century reductionist techniques and thinking are guided by 20th-century holistic decision-making.

The Future of Technological Civilization, a fine book by Victor Ferkiss of Georgetown University, is an excellent example of holistic thinking. I wish every thinker or student could take a year off to read it and most of its references, for it is the best exposition I know of the advanced frontier of contemporary thinking about today's problems and the human condition among them. Ferkiss deals with an area of investigation where science, technology, history, philosophy, psychology, the social sciences, human problems, personal decisions, and government policies converge and tangle. The problems of this area cannot be handled with 19th-

century assumptions and values: materialism, greed, social atomism, determinism, unrestrained competition, reductionism, the plundering of nature, dualism which leads to secularism, specialization and bureaucratization, unbridled technological change, and the exploitation and casual destruction of anything that is incompatible with the narrow perspective of the bourgeois (especially the petit bourgeois) picture of the world.

"Ecological Humanism" Is Advocated

Ferkiss is concerned with how these mistaken ideas (which he calls "liberalism") grew up; what the new outlook, which he calls "Ecological Humanism", is like; how this new outlook can be used to reorganize our world; and what "The Emergent Future" will be like. At least a dozen of his 19 chapters are gems of solid knowledge, high level thinking, and brilliant writing. One chapter, "Roads to Nowhere," shows the futility of seeking solutions to our problems among the available political panaceas: lib-

"The present convergent crises of worldwide inflation, the energy crunch with its attendant dislocation of the world economic and political system, and the looming food shortage have combined to convince all but the most complacent and self-deluded that we are entering upon a new period in world history."

Victor Ferkiss

Cultural Pluralism: Free Love and Free Marijuana

"A Society based on the principles of ecological humanism would seek to maximize real cultural pluralism, since social as well as biological diversity is a source of strength in the evolutionary process. Norman Mailer in his demi-serious campaign for mayor of New York a few years ago suggested that the city be divided into multiple districts, each of which could choose its own way of life. In one neighborhood divorce and marijuana might be outlawed; in another "free love" could be mandatory and marijuana distributed free. However difficult it might be to manage such a polity administratively, behind the obvious absurdity there is a sound premise. In fact, local police have traditionally enforced laws according to local community standards; what is juvenile delinquency or disturbing the peace in one neighborhood may not be in another; and many of our difficulties in social control today stem from the fact that the police often do not understand or cannot accept the norms of the communities in which they work."

From The Future of Technological Civilization

realism; conservatism; Marxism; Socialism; the New Left; Anarchism: "Dropping Out and Copping Out". This chapter should be reprinted as a pamphlet and distributed to every student in this country. It shows its author's remarkable ability to find the essential core of most issues and to sum each up in his clear, lean, sinewy prose. Standing outside and above the turmoil, he sees the action clearly, and he is almost unequalled in his ability to tell us what he sees. His writing is sometimes philosophic and a little dense, as befits a work of high scholarship, but is usually a delight, full of quotable expressions, of which I'll repeat two: "In Locke's ideal world there would be billboards on the sides of the Grand Canyon" and "Human society is not a deterministic system but a collective learning process".

Of the four parts of this volume, I accept almost completely the first two parts, have some spots of doubt about Part III, and more serious reservations about Part IV, which is called "The Emergent Future". In Part I Ferkiss shows how the roots of our mistaken beliefs go back to the ancient Greeks, Persians and Hebrews (or, more generally, to what I call "the Sixth Century B.C. Intellectual Revolution"); how these roots spread, grew, and flowered after A.D. 1400 in the Renaissance, the Reformation, and the 17th century, especially in the thoughts of Machiavelli, Hobbes, Descartes, and John Locke. This Intellectual Revolution eventually reached fruition in the New World where the assumptions of the Founding Fathers, including both Jefferson and Hamilton, were embedded in the American Constitution.

Holistic View Is Needed

Ferkiss would replace these beliefs by quite different assumptions and by a much more sophisticated methodology—not for reasons of personal taste but because the old ideas are no longer capable of solving our accumulating problems. By now it is clear to most thinking people that every decision we make on major public problems simply makes matters worse. The outlook and assumptions which Ferkiss advocates in Part II are superior because they are holistic, eco-

logical, multi-variable, non-deterministic, scientific, and contextual, based on our most recent discoveries about nature, human nature, and society. These new ideas show that the universe is a dynamic hierarchy of sub-systems within systems within more general systems, in which all characteristics arise from processes in organizational patterns within one all-inclusive process of cosmic evolution. In this ultimate process, the qualities which we call "life," "spirituality," "consciousness," and "self-consciousness" or "reason" are natural consequences of emergent evolution, giving rise to indeterminism, freedom, free will, power, and human autonomy while following a non-random, non-statistical, and probably teleological course, which we cannot yet understand.

This new vision of man, nature, and the cosmos makes most 19th-century vocabulary and most earlier philosophic controversies (mind and matter; spirit and flesh; matter and energy; free-will and determinism; man and nature; science and religion; man and society; etc.) obsolete and meaningless. Thus, the new ideas cannot be used to support either side in old controversies or contemporary vested interests. Ferkiss is not concerned with controversies or interests, but with the truth and what must be done, based on a more adequate view of reality. The old ideas, he says, have produced a technology which makes men so powerful in a world of limited size and resources, all inter-related and interdependent, that we must adopt truer ideas and better organizations to avoid possible destruction of our civilization or perhaps of mankind itself.

Growth Has Become Enemy of Life

We live in a cancer society in which growth has become the enemy of life. In economics this means that our economy cannot sell the consumer goods pouring out of existing factories unless we are simultaneously investing more capital and resources in new factories to make more goods or are otherwise providing more purchasing power to the market by inflationary spending on non-marketable products such as national defense. This same characteristic feature of

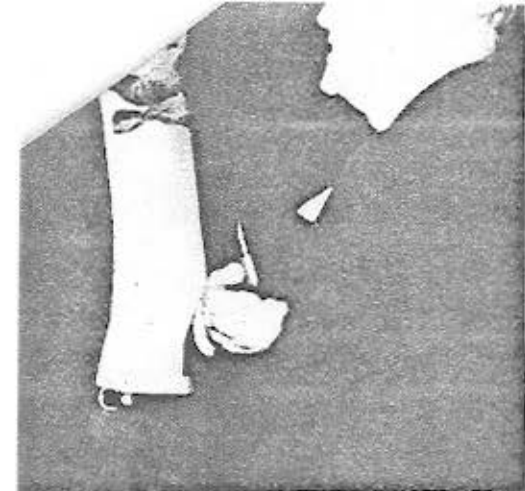
Needed:

Better Information for Government

"A serious weakness of American government at this time of world crisis is its lack of political intelligence. The President and the Congress read newspapers and books—or should. They receive reports from government agencies. They are subject to a flow of information from the electorate about popular perceptions and desires. Yet they find it difficult to understand the world in which they must operate. The reason for this is a simple phenomenon common to modern technological society: information overload. They do not lack information; they have too much of it, and they receive it in a form which makes it impossible to organize and assimilate. Their world is that of the newborn child suddenly faced with an overwhelming cacophony of new sensory stimuli, a world which is a booming, buzzing confusion.

"In order for government to operate, it must have information which is ordered to action; this means information structured in terms of the problems to be dealt with. The information must be future-oriented, since decisions always take place in the future relative to the information they are based on and it is always in the future that decisions are implemented and that their consequences are felt. Given the fact that the interrelated nature of life in technological society makes an ecological, systems perspective of reality mandatory, the information available to government must be so organized that it presents an adequate picture of the inter-relatedness of problems and of data. As various futurists have suggested, we are desperately in need of social institutions designed to collect information about current trends and future possibilities—social "lookout" stations of various kinds. Such institutions can be public or private, national or global, but they must concentrate above all else on the implications for society of present and potential developments in science and technology."

*From The Future of Technological
Civilization*



Victor Ferkiss (left), author of *The Future of Technological Civilization*, chats with the World Future Society's Coordinator of Chapter Services, Frank Hopkins. Ferkiss is Program Chairman for the Society's Second General Assembly, to be held this June.

Ecological Humanism

"The new technological man, who seeks to control the world of which he is the potential master for humanistic purposes, must necessarily have a very different cultural and philosophical outlook from the bourgeois man who has created liberal society. The bases for this new outlook are three overall synthesizing principles: naturalism, holism, and immanentism. The new philosophy is naturalistic in that it is rooted in the assumption that man is part of nature and his salvation lies in acting in accordance with this fact. The new philosophy is holistic in that it is based on the realization that everything in man's world—the physical planet he lives on, the society he lives in, and himself—is closely interrelated in a single system, and that any descriptive or prescriptive principles will have to take into account this entire universe. Finally, the new philosophy is immanentist in recognizing that the re-ordering of human society and man's nature can never come from outside or 'above,' nor can it be blueprinted in advance; it can only grow out of whatever already exists. The form of the new society will only be determined in the course of the process of interaction among individuals and groups and society as a whole as they strive to achieve a greater sense of identity and purpose and a renewed planetary order."

From *The Future of Technological Civilization*

our society, that we cannot use what we already have for the satisfaction of our needs unless we devote increasing increments of time and resources to different future desires, now pervades all aspects of our society. Everywhere our activities now have built-in feed-back loops which require investment in future technical innovations creating new activities or there will be sudden collapse of our existing activities.

For example, the use of antibiotic therapy for infectious diseases creates new strains of microbes which are immune to the antibiotics now being used, so that we must invent new, more specialized antibiotics to control these new infections, leading to an endless cycle in which the broader unspecialized varieties of microbes, antiseptics, and natural immunities become obsolete events in past history. The drug firms do not object to this constant creation of new need for new drugs because that keeps them active in their specialized business.

In food production, the development of new high-yield varieties of crops leads to more uniform and more specialized strains of seeds which demand greatly increased inputs of energy-intensive capital (machinery, water-supply, fertilizers, and pesticides). At the same time, the new strains are increasingly vulnerable to crop losses from normal climate fluctuations and from the natural evolution of more specialized and more damaging pests, especially on the microscopic or viral levels. A report in *Science Magazine* (Dec. 27) tells us that breeding plant varieties for resistance to pests and infections has become "a treadmill from which there is no exit. Resistance often provokes the evolution of new strains of pests. The life expectancy of wheat varieties in the northwest United States is about five years." The seed firms do not object to the obsolescence of their products, any more than automobile makers object to the almost immediate obsolescence of their latest model. But the underdeveloped countries caught in the toils of the "Green Revolution" (which they could not afford in the first place) can hardly be expected to welcome this new kind of colonial subjection, even if Oregon wheat farms do.

Specialization Defeats Itself

The problem is not simply, as Ferkiss believes, that there are physical limits to the world's resources. The real problem is that *extensive, quantitative* growth based on specialization is intrinsically self-defeating, as the history of biological extinctions demonstrates. The successful direction of evolution has always been toward less specialized, more general, more flexible, more adaptable types in the direction of *intensive, qualitative* changes, as in the evolution of man himself toward genetic indeterminism and cultural flexibility. The extreme use of cultural specialization to foster extensive quantitative growth in Western Civilization and to domi-

"There is only one alternative to the subversion of human civilization by alien forces, and that is the creation of utopia."

From *The Future of Technological Civilization*.

nate social decisions marks the approaching collapse of this civilization, as happened in other civilizations in the past. The only possible escape lies in the use of holistic methods, especially of a total costs approach, in making decisions for the future. This seems to me to be very unlikely to happen and to be quite impossible so long as only specialized "experts" are used, and our overly-bureaucratized educational system can now produce little else.

For these reasons, I think Ferkiss is far too optimistic about our ability to reform our system by conscious choice along the line he indicates in Part IV. Reductionist attitudes and methods now dominate every corner of our lives, defended by an unconscious alliance of special interests, corruption, and irrationality. These would be jeopardized by the holistic methods Ferkiss advocates. We holists are a small minority with little influence. Ferkiss believes that "science" supports his position. Holistic science, such as he and I practice, does support him, but 90% of the American Association for the Advancement of Science are reductionist technicians and would repudiate our version of what "science" is. He is a holistic political scientist; I am a holistic historian. Each of us is a lonely voice in his own discipline, and our view would be rejected by the majority of our professional associates. Even publication is restricted for holistic views wherever manuscripts are subject to approval by "expert" referees or editorial boards of specialists.

Individuals May "Cop Out"

For these reasons, I see little prospect of our future being guided in a viable direction by the necessary use of holistic estimates of social costs in centralized decision-making. The likely alternative is that the future of Western Civilization will follow the lines of decentralized, nonrational decisions by individuals such as occurred in the terminal stages of many past civilizations. This means that efforts to make the state, the civilization, and the community coterminous will fail because individuals will "cop out" of the state into local communities, because only there will they be able to influence decisions and only there can they find the exis-

tential, face-to-face personal experiences which their frustrated emotions demand. This is what the Christians sought in the catacombs before Constantine (313-337) and what most Romans did after A.D. 440. Ferkiss sees that American voters all across the political spectrum from the extreme Left to the extreme Right are approaching agreement on one idea—their growing need for a community. But he does not draw from this insight the obvious conclusion that, since there is no national agreement on the nature nor the way to a national community, each voter must eventually opt for his own local community, even if that local community is a ghetto. The anti-busing violence in South Boston and the anti-textbook violence in West Virginia are obvious rejections of Nelson Rockefeller's America. Much more significant, however, is the silent refusal of the

great majority of Americans to vote on November 5, 1974. That refusal had little to do with Watergate; it was the copout which acts as the signpost to our future. And that signpost reads, "To my ghetto."

I hope that Ferkiss is right and that I am wrong. We can judge to some extent from the reception his book gets from the reading public. By any criterion it is superior to anything from J.K. Galbraith, such as *The New Industrial State*, but while Galbraith's books sell by scores of thousands, I fear Ferkiss's volume may sink with little more than a ripple. Galbraith teases the Establishment and they know he is not serious, but Ferkiss threatens them with a real alternative.

REVIEWER CARROLL QUIGLEY IS PROFESSOR OF HISTORY AT GEORGETOWN UNIVERSITY, WASHINGTON, D.C. 20057.

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A Second Review

A second reviewer, David B. King, also a historian, says books like Ferkiss's are essential "if we are to confront with any understanding a future that seems to loom before us more frighteningly with each passing moment." He believes that Ferkiss is moving in the right direction, and if world conditions continue to worsen, his suggestions may be received more warmly.

present work is an erudite extension of his earlier erudite *Technological Man. The Myth and Reality* (1969). Together the two books offer remarkable evidence of broad and careful reading in an amazing variety of subject areas. Ferkiss is also blessed with the ability to organize his material and to present his ideas clearly and frankly. There are none of the glaring inconsistencies and ambiguities that sometimes abound in such efforts. Nor does Ferkiss show any inclination to hang back from unpopular conclusions or to obscure them by oblique reference.

If there are weaknesses in the presentation, they lie in the author's tendency to begin always with a belabored illustration and then to repeat each proposition again and again, as if he suspected that we were not paying attention the first time—an assumption that then begins to have some validity

into the *Human Prospect* and other thinkers.) Ferkiss goes on to assert that the solutions suggested by the currently available ideologies will at best prove ineffective and at worst will be harmful. Old-style liberalism, which insisted on a minimum of government, is totally bankrupt. New-style liberalism focuses too much on the operation of the system and too little on results. Socialism is just as committed as liberalism to growth. True conservatism, with its vision of a hierarchical society, is, given present social assumptions, no longer an alternative, and what now passes for conservatism is, in fact, old-style liberalism. Anarchism has some merit, but its methods are too brutal. And the romanticism of the counter-culture has made its proposals dependent on cultural changes that Ferkiss believes are not apt to arrive on their own.

The middle portion of the book is devoted to laying a philosophical groundwork for "ecological humanism," Ferkiss's invention and his nominee for the ideology most likely to end our rapid slide toward destruction. This is, I think, the book's weakest part—tedious, pedantic, and finally unconvincing.