

## CARING FOR THE FUTURE: WHERE ETHICS AND ECOLOGY MEET

by Carl E. Braaten

Mankind is facing global disaster in the near future. That is not a prophetic statement from sacred scripture but a computer prediction reported by a team of M.I.T. scientists. This team has published its now-famous report under the unspectacular title, *The Limits to Growth*.<sup>1</sup> This is a study of the future as a blown-up version of the present; it is a future in bondage to the conditions and trends which already exist. It is not the liberated future that lives in dreams, not a visionary future projected by men with their heads in the clouds. It is the matter-of-fact future sketched by scientists with their feet on the ground. Unfortunately, not a single person on earth would care to live in the kind of future they portray. We are given the picture of an exhausted future—exhausted because now we are burning up the fuels of life that belong to coming generations. We are sacrificing the children of tomorrow—indeed, their very existence—on the altars of self-indulgence today.

Scientific predictions, of course, do not decree the future. They are extrapolations from the present into the future. They deal with the empirically probable future, not the morally desirable future. They do not rule out the possible emergence of new factors which might well reverse the current trends leading to global collapse. They do not deny the realm of freedom in history, which is the source of surprises, novelties, miracles, and truly revolutionary interventions. Otherwise scientific predictions would render moral decisions meaningless. The meaning of a moral decision presupposes the power of freedom and a still-open future. Here I will deal with these two dimensions in our approach to the future, the scientific and the ethical—the one telling us what the future is likely to be on the basis of known data, however horrid and inhumane, the other moving us to work for a more

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fulfilling future on the basis of conscience, no matter how unlikely and implausible. It is in our approach to the future that our ecological forecasts and our ethical decisions meet and possibly collide. Morally sensitive persons will have to become rebels against the scientifically predicted future for the sake of a morally superior one. We are engaged in a kind of civil war between alternative futures; the time is becoming desperately short; it is not enough to get our facts straight; we must try to get our futures sorted out. To cope with the announcements of ecological damnation on a planetary scale, we must quickly shift our thinking to the future, to develop a future-oriented ethic. Such an ethic does not merely reflect back upon the moral dilemmas of the past, deciding the right and the wrong, the good and the bad, concerning actions that have already happened. Rather, it looks to the future with prospective interest, in terms of an anticipatory calculus.

#### THE ECOLOGICAL PROBLEM

Our educational practice tends to appeal to that aspect of human nature which prevents us from seeing farther than the end of our collective nose. Human beings are very interested in what is coming up next and what is going on immediately around them. In any culture, the people who think in terms of the far-off future—say, the next thirty to one hundred years—and act out of a global awareness are very few indeed. The majority of people care about the next few days, the next few weeks, perhaps about the next few years, and they care about themselves, their families, their jobs, their neighborhoods, perhaps also the well-being of their own race and nation, but that is all. They do not look far ahead in time, and they do not really care about what is happening far away. In terms of the dimensions of time and space, which set the limits of human existence, we all tend to live it up big and spend it all in the immediate here and now. This is true of individuals, of small groups, of nations and their governments. There are very few people who really care about the future of coming generations and who manifest a global consciousness.

If we trace the course of human evolution and cultural development to the present time, we observe that it has never seemed necessary for people heretofore to possess a future consciousness and global perspective in order to survive and thrive. "Sufficient unto the day was the evil thereof." Human survival followed the path of immediate self-interest; each part had only to watch out for itself and that would be good for the whole. Now the reverse is becoming true; there will not be any surviving parts without attention to the future

well-being of the whole—the whole of humanity in a world community that is united in the pacification of the earth planet.

The need for a future consciousness that forms the horizon of a new planetary ethic is bound up with the ecological problem. Not so long ago we were getting mainly good news about what science and technology were doing for mankind. Now we are getting our ears full of bad news about what man and the machines he has made are doing to the earth. Trends have been set in motion that promise to carry away our human future and lay it in a tomb. The trends are widely studied and debated: spreading and accelerating industrialization around the world as the only model for the future on which governments act; continuing the population growth rate in exponential terms; the growing gap between the rich and the poor, the staggering suffering and starvation, the inequitable distribution of goods; then the depletion of the earth's resources in absolute terms; finally, the pollution of the environment, choking off life itself. I am one of those who tend to believe our scientific friends who tell us that if the trends keep curving at their present rate, they will wind up the spring in the mechanism of our human future so tight that it will snap. Human civilization as we know it will die or be disfigured beyond recognition.

I am not concerned here to offer any new data or assemble any new statistics. The large picture is good enough for me. It shows that we are quite rapidly reaching the outside limits to growth that this finite world system will tolerate before it lashes back at its human enemies. We do not know how many more people this earth can provide for or at what level of existence, but we do know there is a limit, and we are rapidly approaching it. We do not know how much wider the gap can grow between the rich and poor nations of the world before all of humanity perishes in the battle of Armageddon. But we know there is a limit to how much suffering and oppression people will and can endure. We do not know the extent of the earth's nonrenewable natural resources, but we do know that the world is running out of gas. We do not know how much pollution this earth can absorb before man will forfeit his "dominion over the fish of the sea, and over the birds of the heavens, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth" (Gen. 1:26). But there is a limit.

What is being driven home to us is the finitude of man and his environment. This is an awareness which has diminished with the decline of religious influence in modern culture. For religion has classically said that there is only One who is infinite; the world and all its creatures are finite. As every person can bear only so many burdens before his back breaks, so the earth—like a vessel—has a limited

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carrying capacity. Kenneth Boulding has developed the metaphor of life on a spaceship:

We have to visualize the earth as a small, rather crowded spaceship, destination unknown, in which man has to find a slender thread of a way of life in the midst of a continually repeatable cycle of material transformations. In a spaceship, there can be no inputs or outputs. The water must circulate through the kidneys and the algae, the food likewise, the air likewise. . . . Up to now the human population has been small enough so that we have not had to regard the earth as a spaceship. We have been able to regard the atmosphere and the oceans and even the soil as an inexhaustible reservoir, from which we can draw at will and which we can pollute at will. There is handwriting on the wall, however. . . . Even now we may be doing irreversible damage to this precious little spaceship.<sup>2</sup>

### FALSE AXIOMS OF SALVATION

There is still abundant optimism that if scientific technology has gotten the spaceship into trouble, it will fix whatever is wrong. Technology can save us! But can it really? The debate rages. Technological optimists believe that there are technical solutions to the problems that face us, and we will find them in time. Critics of technological salvation say that technology works only on the symptoms even while making things worse at the causal level. There are human dimensions—social, political, and cultural—which have deep roots in the religious and moral sensibilities of people which make purely technical solutions seem superficial and even disastrous.

The authors of *The Limits to Growth* are all members of our technological culture. But they say: "We have found that technological optimism is the most common and the most dangerous reaction to our findings from the world model. Technology can relieve the symptoms of a problem without affecting the underlying causes. Faith in technology as the ultimate solution to all problems can thus divert our attention from the most fundamental problem—the problem of growth in a finite system—and prevent us from taking effective action to solve it."<sup>3</sup> On the other hand, it is folly to make technology the new demonology. Some of our problems—given the present stage of the world's development—will not be solved without technology, no matter how successful we become in reaching a desirable state of global equilibrium. Population growth will not be reduced without better contraceptive measures and pollution will not be eliminated without radically improved devices. Technology will play a part in better communications between nations and more effective sharing of all the goods we have.

It would be especially cruel to demonize technology—the heart of our advanced industrialized society—when the nations of the Third

World are struggling to achieve a higher standard of living through technological development. The ecological problem calls for a global solution, and that solution will inevitably embrace two steps. First, the United States and other advanced industrialized nations must sooner or later realize the folly of their growth mentality. For the sake of global justice they will be forced to decelerate and to save themselves from the jaws of their own technological Frankenstein; they will have to enter intentionally into a phase of dedevelopment. The earth is simply too small for all the nations of the world to catch up to the rate of industrialization and productivity of the United States. Therefore, if global justice is to prevail as a future condition of international equilibrium, the United States will have to cut back to a reasonable standard of living. Second, the nations of the Third World will have to develop the concept of alternative technology. Technology, yes, but not Western style, which only means destruction of the earth and death to its peoples.

#### OUR ETHICAL BANKRUPTCY

If we formulate the conditions that seem essential to a viable and desirable future for mankind, we will be accused of speaking the language of utopian hope. For there is scant evidence from human history to arouse easy confidence that leaders and nations ever embark on a course that proceeds from other than narrow egoistic motives, that they will make the sacrifice of national sovereignty for the sake of world community, that they will abandon their competitive and conflictual modes of behavior. If civilization is to survive, we must postulate the arrival of new and unprecedented changes in value structure, attitudinal make-up, educational praxis, and life-style. We simply cannot get to a good future for mankind the way we are going now. Our cultural cupboards are bare, our ethical reserves are bankrupt. Our past has not prepared us for the new imperatives that are calculated to meet the magnitude of our ecological problem.

There are fundamentally two courses that lie before us. Either we continue the present course of disintegrating development, moving from this decade of growing tensions in the world system to the coming decades of desperation and catastrophe, eating our way into the future from hand to mouth, or we proclaim the need for basically new values, new social systems, new political structures—in short, a new birth of consciousness. This new consciousness will be future oriented, giving rise to new models, new symbols, new songs, new rituals, new myths, a new vision of the future and conversion of will to actualize it. I am not saying these new things will necessarily come,

only that the alternative is to tinker with the old system which is speedily ushering in the apocalypse of annihilation.

Ethicists are the middlemen between technologists and theologians. Traditionally, ethical reflection has been oriented to the past, dealing with such topics as the orders of life going back to creation or with the unchanging structures of natural law. Ethics lifted up the values of obedience to authority and duty to the normative traditions that derive from the past. I do not believe that the ethical wisdom of the past is now obsolete and meaningless with respect to the personal and the interpersonal spheres of behavior. But I do believe that our traditional ethic tends to lean backward to the past and therefore becomes speechless and helpless in coping with the actions which bear heavily on the destiny of the coming generations.

The attempt of some contemporary ethicists to free ethics from this bondage to past norms and principles in favor of a "situation ethics" is a total failure with respect to the ecological problem. We cannot wait until we get into the situation of crisis and decision and then intuit the right thing to do, for then it will be too late; our society will have reached the point of no return. If an engine is racing toward an abyss, there comes a time when it is pointless to apply the brakes. An ethics of the future looks ahead for its clues as to what to do now. It studies the future to see what in the present is basically destroying the prospects of a just and fulfilling future for all people. The ethical problem is no longer to develop standards of behavior for past situations. They may never recur. The ethical question is not merely, Have I done what is right? Rather, it is this, Do I (or we) have the right to do such and such? And the answer to that question is not whether it conforms to the moral standards of the past, but instead whether it is a means of bringing promise for the future. This is an ethic of promise—a prospective ethic!

What makes a future-oriented ethic imperative today is the role that prognosis and planning play in modern society. Ethical reflection must take into account all the facts and then propose a decision. Part of these facts are still future; they are things that have not yet happened but certainly will if the present trends continue. If ethical reflection is not effectually present where political and technological powers are planning our future, then it will enter as an irrelevant postmortem. The ethicists of the future must carry a vision of the *humanum*, of the essential humanity of man, into the forums of planning and decision making. They may not leave the planning of the future to technological types. These may be giants in stature when it comes to technical means but moral pygmies on issues of human concern. Jacques Ellul is correct when he says of Einstein: "It is clear

that Einstein, extraordinary mathematical genius that he was, was no Pascal; he knew nothing of political or human reality, or, in fact, anything at all outside his mathematical reach. The banality of Einstein's remarks in matters outside his specialty is as astonishing as his genius within it."<sup>4</sup>

#### IMAGINEERING THE FUTURE

I have been asserting that the ecological problem demands a new ethical stance toward man's natural environment—a future-oriented ethic that is determined by a vision of the essential humanity of man and his natural brotherhood with the world of nature. It will not work to give humanists the past, politicians the present, and technocrats the future to engineer it to death. In addition to these engineers of the future, we need an army of imagineers of a new world. But where will the images of a more human future and a new earth come from?

Willy-nilly, some set of values and interests is being served by any group which holds the power of the future in their hands. The dominant values and interests of the major power blocs in the world today are leading, as we have said, to despair, disaster, and death to all that lives and breathes on this planet. People who care about the future of man and this earth must find ways to replace those values and interests with new ones. They must function with alternative models of the future. These will necessarily have visionary character, for no such models can be transferred from past experiences and precedents. When the authors of *The Limits to Growth* have completed their analysis of the world as it approaches the ultimate limits of a finite system, they hold out a few straws of hope. But just at this point they cease to be hardheaded technological realists and become human beings animated by extraordinary hope. The realistic consequence of their analysis would be anxiety and despair. But they transcend their own realism and begin to postulate new steps for humanity, the possibility of creating a "totally new form of human society."<sup>5</sup> There are only two missing ingredients. One is a meaningful goal that can guide humanity to an equilibrium society that this earth can support, and another is a commitment of will to achieve that goal. But that is utopian language, for such a goal and such a will are really new things. They are certainly not in line with the drives and tendencies that people and nations exhibit today.

"None of our wise men ever pose the question of the end of all their marvels," says Jacques Ellul.<sup>6</sup> The survival of mankind under more fulfilling conditions of life for all will assuredly call for a new breed of wise men. There is no guarantee that humanity will not go the way of the dodo and the dinosaur. Naturally, as a human being I am prej-

udiced, but I think mankind is worth saving. We have termites in the foundations of our house. We believe our house is worth saving, so we go after the termites. And the house will stand as a comfortable place to live. So it is with the earth. It is a nice place to live. But getting rid of the termites will not be easy because people are the termites. The ecology movement has coined the saying that people plus pollution means popollution. And that is why we will need wise men, experts in the science of the *humanum*, in the days to come.

While rummaging through a bookstore, I ran across a new book entitled *This Endangered Planet: Prospects and Proposals for Human Survival*, by Richard A. Falk. I hope it will be a much-read and much-discussed book. He writes one paragraph which states precisely what I am proposing:

There are several steps that need to be taken: first, we need to understand the inability of the sovereign state to resolve the endangered-planet crisis; second, we need a model of world order that provides a positive vision of the future and is able to resolve this crisis; third, we need a strategy that will transform human attitudes and institutions so as to make it politically possible to bring a new system of world order into being; fourth, we need specific programs to initiate the process, as with learning to walk—we need to learn to walk into the future.<sup>7</sup>

We need to work out a whole new world view which is shaped by the horizon of the future, of a noble, beautiful, harmonious, human, and planetary future. Our private and individual futures cannot go their own way *laissez faire*. We adopt the ecological notion that the destiny of each individual must be seen as linked to the future of the total system. The salvation of mankind is not a free-for-all, each one grabbing what he can out of the commons that exists for all alike.

A future-oriented ethic that can help to humanize technology cannot live from itself. It must be hinged to a holistic image of the future that pulls humanity out of the ditch onto a high road. Such a picture of the future may release a new spurt of the human spirit, alluring and activating it to seek goals and pursue actions that previously seemed incredible. There is a very close link between images of the future and ethics. Ethics deals with the realm of what ought to be; our picture of the future can mirror what ought to be and give shape to it in a way that contrasts radically with the actual present. Our dominant habits of thought in the West have been crippling this mental capacity to visualize a different future. But when we lose our power to envision a future alternative to the extant present, we have lost our freedom, and thereby our dignity and our humanity. We have become machinelike robots. The widespread despair in our time—manifest in



the use of mind-blowing drugs, nerve-jarring music, high rates of killing speeds, world-escaping religion, and fascination for the occult—can be explained by the loss of faith in the power of the future to bring something different from what the present holds.

#### THE EDUCATIONAL TASK

The development of an ecological humanism that is worldwide will require a rebirth of images of the future that are still alive—although latent—in the religious culture of the world. There are rich deposits of such culturally significant images in the classical period of Greece and Rome, in the Scriptures of Israel, and in primitive Christianity. These futuristic images of man in the world produced the utopias of the Renaissance; they gave birth to the impulses of freedom in the Reformation, the drive to emancipated reason in the Enlightenment, the revolution to justice in modern socialism, the belief in scientific progress in the nineteenth century, and, finally, the hope for the unity of mankind in the twentieth-century ecumenical movement. These images of the future have worked like a flying wedge on the frontiers of time, clearing the way for the troops in history, inspiring their courage, and arousing their hope. These images of hope have kept the spirit of men and women alive with fiery enthusiasm. When the images die or become contracted to the pragmatics of the present moment, we are at the beginning of the end of a civilization. A culture with no driving image of the future has come to the end of its history; it has lost its lever of movement and progress.

If the history of culture is the history of its images of the future, as Frederick Polak says,<sup>8</sup> the most urgent challenge facing mankind today is the creation and renewal of a living faith in the realm of the future beckoning on the world's horizon. We are viewing the crisis of our culture—the ecocrisis—as a spiritual problem beyond the scope of technological salvation. People will not care for a future they do not believe in. Considering the ecological dimension of the problem of the future, we are seemingly speaking of a faith which can move mountains.

William Pollard, well-known scientist and author, says that this faith will probably not be forthcoming short of a catastrophe of unspeakable tragedy: "We can only foresee social paroxysms of an intensity greater than any we have so far known. The problems are so varied and so vast and the means for their solution so far beyond the resources of the scientific and technological know-how on which we have relied that there is simply not time to avoid the impending catastrophe. We stand, therefore, on the threshold of a time of judgment more severe, undoubtedly, than any that mankind has ever

faced before in history."<sup>9</sup> And yet he chooses to believe that on the other side of judgment there is hope for man and the earth. Man will come to appreciate the beauty and the holiness of the earth, to woo and to love it, luring it into ever more creative achievements. However, "to do this it is first necessary for man widely and generally to recover his lost sense of transcendent reality."<sup>10</sup>

I would rather make the impending catastrophe conditional. It is coming unless man ceases the rape of the earth. The future is still open; there is still time to reverse the process. That is the educational task that faces us. But where will a people be found who already begin to live the life of a wholesome future under the conditions of the present? The positive aspects of the future must make openings in the present for people to experience. Education must become anticipatory; activity must be expectational. Thinking and acting must have a thrust to the future to break the bad habits we have learned from the past. The study of history is an essential component of a whole curriculum. But our children, like we ourselves, are only getting half an education because we do not teach them to think and live from the future back to the present, from the whole to the parts, from the end state to all the steps leading to it. The maps of our world are still flat; we do not see the whole in all its multidimensional complexity. Alvin Toffler in *Future Shock* writes: "When millions share this passion about the future we shall have a society far better equipped to meet the impact of change. To create such curiosity and awareness is a cardinal task of education. To create an education that will create this curiosity is the third, and perhaps central, mission of the super-industrial revolution in the schools. Education must shift into the future tense."<sup>11</sup>

We need a future-conscious community of committed people who care for the future and will make it their life mission to infiltrate all other communities with the good and bad news about the future. They must come from the ranks of scientists and technologists, politicians and economists, but also poets and priests. They will be united by a common vision of the future in which technology becomes domesticated, strictly a tool applied to worthy human ends. Not the question, What can we do? but rather, What ought we to do? will define our priorities. But this ethical question of what is right depends radically on a vision of the good. Since we can have no photographic pictures of what is good, for the good that we seek is yet to come, we hold our pictures of the good as images of the future. They have a kind of double exposure; they mirror the present in its needs and lacks, and they hold up a future in its possible glory and grandeur, and in this double way they work retroactively, as it were, in shaping the present values and decisions of people.

One of the cultural imperatives which the ecological crisis lays upon us is the overcoming of the artificial divorce between religion and science. Such a divorce is a luxury our culture can no longer afford. We all live in one world and breathe the same air. The future of science and technology cannot be discussed apart from the values and goals which command the interests and loyalties of the masses of people. No one can discuss for long the ecological crisis before complex ethical issues are raised.

Christianity entered the world with an eschatological vision of the future of the world. It is still the dominant religion in the West. The question it faces is whether its belief in the future has any relevance to the universal dialogue concerning a more human future for all mankind. It is a common failing of religious people to link their hopes to a purely otherworldly future or to an inner personal salvation. And that is precisely why many people who deal with the hard decisions that bear on the technological and social future of mankind expect little help from the church and its religious and ethical beliefs. It is hoped that the renewal of the Christian vision of the eschatological future of man and his world and the qualities of its promises and hopes will commingle with the models of the future which are now being constructed by an elite corps of futurologists in every country. The role of a compassionate religion is simply to keep the spotlight on the human face of man in every discussion, in every experiment, in every scheme that futurologists devise—especially the human face of those who are poor, powerless, and futureless—so that the least of all our fellow beings may be liberated for a fulfilling life on earth. The ethical criterion that should be applied in every contribution to technological progress is, What does it imply for the future of man and his environment? The human factor must always provide the normative element in discussing the wonders of technology and our ecological future. This homocentric concern is the point at which ecology and ethics meet.

As scientists, technologists, statesmen, industrialists, ethicists, and theologians become pressed to take up this theme of caring for the future on a universal scale, they will quickly experience the frustration of using futuristic language in different frames of reference. In scientific and technological futurology, the future is the exemplification of trends extrapolated forward from the present. In a future-oriented ethic the future attains a dual meaning; it is like a rear-view mirror, giving us a view of past and present realities from a futurist point of reference, and at the same time like a spotlight pointing ahead, showing the way we ought to go. The decisive element in ethical language is the dimension of oughtness, for that gives expres-

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sion to the self-transcending dynamic essential to the humanity of man. We have not been speaking of the future in a strictly theological sense here. Theology speaks of the ultimate future of man and of the world. It speaks of God as the power of the future of man and of the world. It speaks of God as the power of the future that confronts every present, placing it under judgment and also mediating new possibilities. The future of futurology and the future of theology are not therefore completely unattached and unrelated. There is a point of contact, namely, in identifying the ground and source of the new which must intervene if the future of man and the earth is to enjoy a quality leap beyond the confines of the present, if the future is to be something more than a quantitative prolongation of the past and the present, if there is to be a real future that matches the promises we bear as vessels of hope. It is hope that teaches us (*docta spes*) about the other dimension of the future, that makes us restless until we break out of the one-dimensionalism—the monocular outlook—that today threatens to destroy the humanity of man and the world that houses him.

### NOTES

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2. Kenneth E. Boulding, *Human Values on the Spaceship Earth* (New York: National Council of Churches, 1966), p. 6.
3. Meadows et al., p. 159.
4. Jacques Ellul, *The Technological Society*, trans. John Wilkinson (New York: Alfred A. Knopf, 1964), p. 435.
5. Meadows et al., p. 188.
6. Ellul, p. 436.
7. Richard A. Falk, *This Endangered Planet* (New York: Random House, 1972), p. 15.
8. Frederick Polak, *The Image of the Future* (Dobbs Ferry, N.Y.: Oceana Publications, 1961), 2:115.
9. William Pollard, "The Uniqueness of the Earth," in *Earth Might Be Fair: Reflections on Ethics, Religion, and Ecology*, ed. Ian G. Barbour (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 96.
10. *Ibid.*, p. 97.
11. Alvin Toffler, *Future Shock* (New York: Random House, 1970), p. 427.