ENVIRONMENTAL CONCERNS AND THE NEED FOR A NEW IMAGE OF MAN

by William H. Klink

One generally thinks of technology and the technological society as antithetical to the I-Thou relationship. Technology offers us gadgets and comforts at the expense of dehumanizing assembly lines, computers probing into our private lives, and food and drugs in plenty, but sometimes of questionable value. Yet it is often argued that man has more chances than ever before to be human; that technology has provided large numbers of people with opportunities to humanize themselves and their society in ways that were not previously available. Thus there is a profound ambiguity apparent, in which technologically developed cultures sense both the latent possibilities for humanizing their society using technology and the destructive tendencies inherent in technology.

One such area of ambiguity that will be of concern in this essay deals with the environment. The environmental issues being raised today are a direct consequence of sophisticated technology. This essay will try to show that even while the ambiguity felt toward technology remains, there is the possibility of having a relationship with the environment which is an extension of the I-Thou relationship and possible only in an age capable of producing a sophisticated technology. Such a possibility arises only when a culture is at a stage of technology sufficiently advanced and sophisticated to have the means for dealing with the environment as a whole. While the idea of treating technology as an important component in culture is hardly new, I wish to show that consequences of sophisticated technology for philosophical anthropology are new and extend Buber's analysis of the I-Thou relationship. In short, any modern answer to the anthropological question—what it means to be human—must take into account in a fundamental way man's relationship to the environment as a whole;

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moreover, this relationship to the environment as a whole contains elements in it that have not been previously possible because of a technology which itself has come into being only in the last fifteen years or so.

ANTHROPOLOGICAL FRAMEWORK

In order to develop this thesis, it is necessary to have some sort of framework within which anthropological questions can be raised. Since we are discussing an enlargement of the I-Thou relationship, it is appropriate that such an anthropological framework be found in an essay of Martin Buber, entitled "What Is Man?" For Buber the anthropological question was always of central importance, as can be seen not only in the essays found in *Between Man and Man* but also in his more famous *I and Thou*.[1]

Buber points out that any answer to the question, What is man? cannot be of general philosophical nature, for any answer must include man in his wholeness—that is to say, not merely man's psychological, theological, metaphysical, or scientific sides but all of these aspects. In particular, for any answer to contain the wholeness demanded by Buber means that it must also include the subjectivity of the person giving the answer. This demand, to take into account the wholeness of man, will be important later on when man's relationship with the environment through technology is explored.

In a section devoted to the history of the anthropological question Buber distinguishes between what he calls epochs of habitation and epochs of homelessness. There are, according to Buber, periods of history when there exists an image, a picture of the universe which gives the holders of that image a feeling of security, a feeling of knowing where they fit into the scheme of things, both collectively and as individuals. Such an epoch, Buber says, occurred in the Middle Ages, when the feeling of being at home in the universe was provided by the Christian vision. Buber cites Dante as "painting" the picture of this vision and Aquinas as giving it its conceptual framework.

But these periods of being at home in the universe, of having an image of the universe, are contingent upon holding closed notions of space and time. And so, with the Newtonian revolution of space and time—with the impossibility of picturing the universe because of its infinity in all directions—a period of so-called homelessness followed, and the comforting security of the Middle Ages' image of the universe was eroded. Buber notes that various other attempts have been made to recover an image of the universe, notably by Marx and Heidegger. But Buber feels that neither has treated man in his wholeness, in all his dimensions. Buber faults Marx for overemphasizing man in his

social context, for reducing man to a decisionless element of a larger society; that is, Marx has reduced the image of the universe to an image of society. On the other hand, Buber faults Heidegger for being concerned only with the relationship of a human being with himself. Thus, Buber says, "If individualism understands only a part of man, collectivism understands man only as a part; neither advances to the wholeness of man, to man as a whole."[2] He continues:

Both views of life—modern individualism and modern collectivism—however different their causes may be, are essentially the conclusion or expression of the same human condition, only at different stages. This condition is characterized by the union of cosmic and social homelessness, dread of the universe and dread of life, resulting in an existential constitution of solitude such as has probably never existed before to the same extent. The human person feels himself to be a man exposed by nature—as an unwanted child is exposed—and at the same time a person isolated in the midst of the tumultuous human world. The first reaction of the spirit to the awareness of this new and uncanny position is modern individualism, the second is modern collectivism.[3]

Buber's solution to the modern anthropological dilemma is well known. The life of dialogue, of the I-Thou relationship—or, as he expresses it in this essay, the existence of the Between, is what mediates between and breaks out of the one-sidedness of either the Marxist collectivism or Heidegger's individualism. Thus, Buber's answer to the anthropological question is known to all those who have read his book *I and Thou* and has as its most important component the possibility of an engagement, an encounter of an I with a Thou. To be human, says Buber, is to have a threefold relationship—with things, with persons, and with the Eternal.

Now what does this anthropological setting have to do with environmental questions? For Buber, homelessness resulted after the Middle Ages because it became impossible to have an image of man. And the image of man was lost because Newtonian science presented man with a notion of space and time which no longer was capable of carrying an image. Another way of stating this is to say that space and time became relativized. As far as the universe as a whole is concerned, there is nothing more important about being here and now than being somewhere else in the galaxy; in fact, as far as cosmological events are concerned, we know that it was much more exciting about one thousand years ago in another part of our galaxy when a huge supernova explosion took place. Not only do we believe that we are not at the center of the universe, but we do not even know what it would mean to be at the center. But the relativizing does not end with

the relativizing of the notions of space and time. Darwin brought about a biological relativizing; and perhaps even more important has been the relativizing due to historical criticism, psychology, and sociology. Historical criticism gives a sense of the historical nature of all things, including things sacred, and results in the weakening of claims of uniqueness of, for instance, the Bible. And if historical criticism leads to the perspective that even the most sacred elements of a tradition are seen as human products, then psychology pushes even further by suggesting that not only can all elements of a tradition be seen as human but they can also be explained as being human. Sociology—particularly the sociology of knowledge—then steps in and claims that what people find credible, what they view as being real, depends on the social support they receive, on what Peter Berger calls plausibility structures.[4] But it is one thing intellectually to comprehend these relativizing tendencies and another thing existentially to feel them. Buber notes how terror stricken Pascal was when the real import of the infinity of space and time hit him—with its vastness, emptiness, and concomitant meaninglessness.

In the case of biology and geology—and in particular evolutionary theory—we have all come to understand how our planet came to be what it is today; these disciplines have even indicated to some extent the laws that are operative in a closed ecosystem. But I believe that it is only in the past ten years or so that a significant number of people have begun to sense—in the way that Pascal sensed the infinity of space and time—how their own ecosystem could go into a strange and terrifying imbalance, with unknown, long-range consequences. It is only in the past few years that mankind has begun to feel in its bones what it means for the environment to be not a stable given but a delicately balanced system which can fairly readily be altered with massive infusions of technology. What was once taken for granted, namely, the stability of the earth, has, through modern technology, become problematic. And the environmental issues that constantly keep arising are but manifestations of this new problem. One can thus claim that the givenness of the earth has been relativized.

But, one might argue, there have always been environmental problems. It is said that what is now the Sahara desert was once fertile land, but certain farming practices along the Nile caused the land west of the Nile to become barren. It is known that nature has polluted the air much worse than anyone in Los Angeles could imagine, merely through erupting volcanos. The Ganges river is reputed to have been polluted already for thousands of years. In any event, it seems that for pretechnological man the environment was seen as a given; the goal was to survive, and surviving meant trying to live in

the environment as well as possible, which meant trying to live in harmony with the environment, trying to anticipate its whims and seeming arbitrariness.[5]

But with a developing technology man began to realize that he could affect his environment, although it was not until more recently that man began to sense that the environment had a life and being which was subject to laws and was in dynamic balance. Further, the initial effects of technology caused pollution only on a local scale, and nature had the resources to cleanse the pollutants. Even up to World War II there was the feeling that technology could be pushed quite hard and the affected ecosystem would remain reasonably unaffected and unchanging. After all, one had learned how to get along with polluted streams in Europe and Asia—and the air in London was worse then than now. One has only to read Sherlock Holmes to realize that he would have no chance of catching Professor Moriarty without pea-soup fogs. And it was known that various species had died out —from dinosaurs, through no fault of man, to passenger pigeons because of man.

However, with the massive doses of technology we have employed since World War II, we are in a position for the first time to feel how the environment can be upset in a global fashion. We see DDT going through plant and animal food chains which cover whole continents. We read about the effects of dumping massive quantities of garbage in oceans—these same oceans that we once thought were indestructible. We see nuclear wastes being disposed of in deep underground wells only to emerge again in the form of radioactive pollutants hundreds of miles away. Now these horror stories could be endlessly multiplied, but the point being made here is that for the first time in the history of mankind we can begin intuitively to feel the delicate balance of the earth and how it is possible to upset this balance, that the earth can go off into a completely unpredictable course. In more technical jargon, we are seeing for the first time dramatic, nonlinear effects of ecosystems. It is no longer the case that if a local pollutant is introduced into the ecosystem, only a local irritation will result; rather, nonlinearity means that after certain thresholds are reached, local effects are greatly magnified and readily become global effects.

Thus in a theological sense there is no longer just the cosmic drama being played on a fixed stage; rather, the stage itself is starting to wobble and become precarious. And the cause of this wobbling is technology. Not technology in the sense of new technological breakthroughs, but technology seen as simply growing up, as becoming larger and more sophisticated. To see this consider the following example: a television set represents no great technological break-

through compared with radio, and yet, as McLuhan has told us, the small increase in technological sophistication has made a great deal of difference in our perception of things. For whereas we are actively involved in a radio drama through our imagination, and through the linear flow of imagined events, in television we passively receive a flow of information, and the temporal aspects of this information are subsumed within the spatial aspects. There is a nonlinear threshold effect in the electronic media which has involved dramatic changes in perception with only small changes in technical sophistication.

So too with ecosystems. And, in fact, with regard to nature, these nonlinear threshold effects caused by even small changes in technological sophistication have produced some very positive results. Most people under forty in the United States do not know what it means to starve. From Buckminster Fuller we learn that just in the period from 1900 to 1960 technology has made it possible for the number of people who can live a decent material life to increase from about 5 percent to about 30 percent of the world's population.[6] And he feels that with continued technological process it should be possible to give everyone on the planet earth a decent life, even for a population of ten to twenty billion people.

But at this point our ambiguity toward technology becomes very apparent. One can be a technological optimist—like Fuller—and say a utopian state on earth will be achieved, in spite of man and his nature. Or one can emphasize the way in which man is using technology to pervert and destroy the environment[7] and perhaps, wishfully, conclude that a return to a simple rural agricultural life is the best answer, that everything should be done to check technology and go back to earlier forms of civilization when technology was less powerful.

I would argue that both of these points of view are misguided. Fuller seems naive about the nature of man and his latent possibility for destruction, and even within his framework he still implicitly assumes that freedom for individuals to define new alternatives for themselves is of less importance than the necessity to provide standardized services at reduced rates. On the other hand, it seems equally naive to hope that by some means mankind can be persuaded to return to a type of civilization with a less destructive form of technology. The problem is that both of these "solutions" make use of a view of man that is less than whole. Thus, it is clear that while technology cannot be the key to understanding man, it must nevertheless play an important role. If we want to take Buber's dictum of the wholeness of man seriously, any anthropology dealing with post–World War II man must include technology as an important component.

TECHNOLOGY—A BASIS FOR MAN-ENVIRONMENT RELATIONS

And one way in which this can be done is to extend the notion of the I-Thou relationship into those domains where technology plays an important role in defining the relationship. In *I and Thou* Buber writes of the relationship he had with a tree by way of illustrating that the I-Thou relationship is not restricted to human beings. But Buber apparently thought of the possibility of such a relationship with a nonhuman entity only in terms of a one-to-one encounter and never took into account the possibility of a relationship of man with his environment on a larger scale, mediated by technology. For Buber never was concerned with technology as such or, if he was, it was in the sense of decrying the dehumanizing aspects of technology.

How, then, can one broaden the notion of the I-Thou relationship using technology? I have argued that before the global effects of technology—roughly dating back to World War II—the environment provided a more or less fixed background in which the events of history were played; technology then produced only local effects on the environment. But, with the advent of sophisticated post–World War II technology, it has become apparent that global effects can drive the environment as a whole into a state whose outcome is not foreseeable or desirable. As human beings of the midtwentieth century we are able to sense the delicate balance of complex ecosystems because we now have the tools and the consciousness to alter that balance. To put it differently, we are able to interact with the environment in such a way as to see what sorts of responses are elicited under prescribed large-scale uses of technology. Swamps are drained for residential or industrial uses, and the environment responds with flooding or increases in the insect population, to which we respond with dams or pesticides. The pesticides are often uncritically used in massive amounts, and the effects go through a complicated food chain until it becomes dangerous for humans, at which time another antidote is required. Now the general conclusion to be drawn from this and many other examples is that because of the fantastically non-linear behavior of our closed ecosystem—the earth—it is in principle impossible to discover laws which are capable of predicting what sorts of changes will occur under a specified technological input. This is because such "laws"—starting with quantum mechanics in the domain of physics and going through chemistry, biology, geology, etc.—would be statistical in nature and hence applicable only to ensembles of systems. But the earth is unique, and statistics by definition cannot deal with uniqueness. Thus, the tendency of modern technology to interact globally—that is, with the earth as a whole—means that

in principle it is impossible to predict with any assurance what impact that technology will have on the future "life" of the earth. Of course, we can pretend that the structure and "life" of the earth can be discovered—with enough research, money, and time—but then the results of our technological interactions with the earth can only be experienced retrospectively; we then hope that our "laws" were correct and hope that our technology has not sent it (and us) to our mutual destruction.

The same attitude is possible with human beings—they can be viewed scientifically as automata, complicated neural networks, capable only of reactions that are conditioned by stimuli, etc.—but in so doing the possibility of an I-Thou relationship is lost precisely because such a scientific viewpoint is to be seen as an I-It relationship. So, too, with our relationship to the environment; it can be mechanical, object-like, in which machines, fertilizers—in short, technological tools—are used with little or no concern for the long-range consequences. Or we can treat the earth as a Thou, using technology to become sensitive to the needs, and see the existence, of a living dynamic organism. This is done by interacting with our environment using the most sophisticated technology possible in such a way that there is a constant feedback process, in which man through technology learns of the equilibrium of the environment, then tentatively tries out new technological interactions, and sees what it is that upsets the environment. In short, man not only has the possibility of having an I-Thou relationship with elements of the environment but, because of modern technology, is able to extend the I-Thou relationship to the whole of the environment.[8]

What we are doing, however, is treating the environment as an It. Massive infusions of DDT into the ecosystem with little care for or sensitivity to the consequences is analogous to treating humans as objects to be humiliated. And the point is that this sort of humiliation is something very new in the history of mankind, for it requires the kind of supportive technology that has only recently come into being.

As one example of how the dialogue of man and the environment is carried out, consider the currently fashionable notion of recycling. Recycling groups are springing up all over the United States, recycling paper, cans, bottles, and the like. Generally, these groups are volunteer groups consisting of people who are genuinely concerned with the environment. But anyone who thinks that returning beer bottles to the grocery store, sending newspapers to recycling centers, or occasionally putting garbage into a compost pile makes any difference as far as combating the pollution problem is concerned is—to my mind—naive or optimistic or both.

What, then, is wrong with such attempts and why should they even be tried? To my mind what is wrong is that, though the people in such groups are sensitive to the environment, they are not employing the sophisticated technological tools that are available and to that extent are not engaging in the kind of I-Thou relationship that would be possible using technology. As to why such attempts should even be made, I would argue that it should be done in an effort to know our environment better, for in the environment we see the recycler par excellence. Now I mean to include in the concept of recycling all the technological means at our disposal. It may mean trying out solid waste incinerator systems and seeing how a given ecosystem responds to them. It may mean separating garbage and sending only certain components to a landfill, or it may mean sending all garbage to a comprehensive recycling system, as is now being tried in Franklin, Ohio. Recycling, then, is one example of how a dialogue between man and earth is carried out. It is a dialogue because two centers, man with his technology and the earth, are responding and relating to each other. And such a dialogue takes on a ritualistic meaning for those who are engaged in the attempt to relate to the environment as a Thou. The significance of the recycling groups can be seen in just this ritualistic sense.

To the extent that the thesis that anthropology includes technology is correct, it has interesting theological ramifications. Many people have pointed out that for Buber anthropology leads directly to theology and vice versa.[9] The reason for this is that for any encounter of an I and a Thou even to be possible presupposes what Buber calls an eternal Thou. The reason that men can have an encounter with, for example, a tree, is that the tree is grounded in God, who as the eternal Thou is the ground of all I-Thou encounters. Buber says: "The eternal Thou is not merely an abstraction from concrete encounters. . . . It is . . . the Thou that by its nature cannot become It, which cannot be limited by another Thou."[10] Thus Buber sees transcendence in any I-Thou relationship.

Analogously, any genuine relationship of man and technology with the environment also allows for signals of transcendence. This is because the relationship between man and technology with the environment cannot be understood, cannot be exhausted by the understanding of the individual components. Just as an I-Thou relationship between two humans cannot be understood solely in terms of those two humans but breaks out, transcends the two humans, so too the relationship of man and technology with the environment requires going beyond just an understanding of man and the technology he has created and an understanding of the environment. It is worth

noting that this possibility for seeing signals of transcendence in the relationship of technology and nature is developed more fully in Robert Scharlemann's essay, "Models in a Theology of Nature."[11]

A further theological consequence is eschatological in nature, for to develop an image of man involves not only what man is but what he will be. Developments in theology since World War II have moved from existential to political themes, so that one speaks of a theology of revolution, a theology of the Third World, and the like. From this point of view theology is interpretation of the history of the world in the light of its end. But, if technology is an important part of an-thropology, then theology must also include the history of the envi-ronment in the light of its end. It would follow that, for any es-chatological model to make sense, the environment with man and his technology must be seen in their mutual relationship, moving toward an end together.

Buckminster Fuller and Jacques Ellul—in different ways—both have visions of the future in which man is overcome by technology. Those who mount a polemic against science and technology do so because they see a future scientific culture in which science and tech-nology have become the tool for those lusting for power —government, industry, the military, labor, advertising, perhaps even the university or the church. While these views are certainly real possibilities for the future, they are based on partial views of man and do not allow for the rich and full relationship that man might have with the environment.

Technology provides the means for a new relationship of man with the environment which can be seen as an extension of the I-Thou relationship. To the extent that this thesis is correct, it suggests an alternative to the technological optimism of Fuller and the technolog-ical pessimism of Ellul, insofar as technology is subsumed in the I-Thou relationship. Buber says we realize our own humanity in rela-tion to other humans, to things, and to the Eternal; the thesis here has been that we also realize our own humanity in our relationship to the environment. For, although man has always had a relationship with the environment, this relationship—for primitive man and even going well into the modern era—was defined by the environment. Man's environment was like a benevolent—or, if people were starving or dying of the plague, not so benevolent—Prussian father, making and carrying out the rules. It was like the relationship of a parent to a child. But the child has grown up and, using technology, has humbled the parent to the possible point of death, not realizing that if the parent dies, the child also will die. Yet, in spite of these destructive possibilities, there is the hope of a fuller and deeper relationship—of

two Thou's, each needing the other, each respecting and listening to the other. And, as with all such relationships, this one has the possibility of being creative or destructive.

We are living in a period when we have the capability of understanding what it means to be human in a way not possible in earlier generations. For many generations man related to the environment as a child; more recently, he has behaved like a spoiled adolescent. Let us hope and pray that he will soon become an adult, capable of having a mature relationship with the environment, so that he may more fully grasp his own humanity.

NOTES

1. Martin Buber, *Between Man and Man*, trans. Ronald Gregor Smith (New York: Macmillan Co., 1965); *I and Thou*, trans. Ronald Gregor Smith (Edinburgh: Clark, 1937).

2. *Between Man and Man*, p. 200.

3. Ibid.

4. See Peter L. Berger, *A Rumor of Angels: Modern Society and the Rediscovery of the Supernatural* (Garden City, N.Y.: Doubleday & Co., 1969), and references cited therein.

5. For a different interpretation, see Mircea Eliade, *The Sacred and the Profane: The Nature of Religion*, trans. Willard R. Trask (New York: Harcourt Brace & Co., 1959).

6. See, e.g., R. Buckminster Fuller, Eric A. Walker, and James Killian, Jr., *Approaching the Benign Environment* (University: University of Alabama Press, 1970).

7. See, e.g., Jacques Ellul, *The Technological Society*, trans. John Wilkinson (New York: Alfred A. Knopf, 1964).

8. It should be pointed out here that in fact human beings can relate only to parts of the environment at a given time. What is new in this relationship are both the possibility of interacting with large parts of the environment (e.g., whole river basin systems) and the collective way in which people are able to carry out this relationship because of technology. This means that, if the anthropological setting were examined in more detail, it would be necessary to try to understand how human beings can act collectively and still retain their individuality. Buber discusses this question very briefly (*Between Man and Man*, p. 175) by introducing what he calls the "essential we." He seems to be pointing to something like the old craft guilds or perhaps the way in which teams of scientists work together on an experiment. In any event, the essential claim being made here is that one can take arbitrarily large segments of the environment and see the "Thouness" manifested in those segments.

9. See, e.g., the essays in *The Philosophy of Martin Buber*, ed. Paul A. Schilpp and Maurice Friedman (La Salle, Ill.: Open Court Press, 1967).

10. *I and Thou*, p. 112.

11. In *Philosophy of Religion and Theology: 1971*, ed. David Griffin (Chambersburg, Pa.: American Academy of Religion, 1971), pp. 150–65.