

THE ETHICS OF NATURE AND NURTURE

by *Van Rensselaer Potter*

In 1962 I was invited to participate in a celebration of the one hundredth anniversary of the Morrill Act, which established the land-grant colleges. I chose as my theme "The Concept of Human Progress" and spent most of my allotted time arguing two main points: first, that progress is not inevitable, and second, that widely held concepts of human progress will have to be drastically revised if humanity is to survive. This essay was my first step in a series that finally led to the publication of a small volume in which the new hope for a "bridge to the future" crystallized in a word—bioethics.¹ In my innocence, it never occurred to me that the concept of "progress" was inherently fictional, if not actually sinful, in the minds of many scholars who had devoted a great deal of thought to the subject. I never doubted the validity of the concept as a goal, it was just that I assumed that there were several kinds of progress and that all of them came at a price. My acquaintance with the concept grew out of my training as a biologist and also from a fortuitous purchase in 1958 of a secondhand copy of Darwin's *Origin of Species* (6th edition) at Blackwell's. In his conclusion Darwin commented that since "no cataclysm has desolated the whole world . . . we may look with some confidence to a secure future of great length." "And," he continued, "as natural selection works solely by and for the good of each being [surely an exaggeration], all corporeal and mental endowments will tend to progress towards perfection." As Darwin contemplated the future, he saw a world in which "a grand and almost untrodden field of inquiry will be opened, on the causes and laws of variation, on correlation, on the effects of use and disuse, on the direct action of external conditions, and so forth." In this one sentence we can see the germ of the whole subject of *nature* and *nurture*, the two forces that must be reckoned with if humanity is to survive and progress. Darwin never doubted either survival or

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progress for mankind. Today we are sure of neither, and thoughtful individuals everywhere are earnestly convening in search of answers. With the interjection of the issue of survival, the old question takes on a new urgency. We no longer can ask merely which *is* more important, nature or nurture? Today, we are impelled to inquire what *ought* we to do, or what *must* we do to survive? Thus the question becomes an ethical one, and we are confronted with an old question in a new frame: the moral decisions of ethics seen in the light of the facts of nature and nurture, which is what I believe bioethics is all about.

Subsequent to these first steps into Darwin's final pages, it became apparent that the concept of progress has a history with almost no beginning and no end. In a recent overview on "The Nature of the Darwinian Revolution," a leading student of Darwinism, Ernst Mayr, emphasized that it was the *refutation* of the concept of an automatic upward evolution that Darwin had to accomplish, along with the refutation of at least five other widely held basic beliefs, in order to achieve fully what we now think of as the Darwinian Revolution.² Thus, despite the sentence I quoted from Darwin's final pages, Ernst Mayr emphasized that "Darwin's conclusion, to some extent anticipated by Lamarck, was that evolutionary change through adaptation and specialization by no means necessitated continuous betterment," in contrast to "every evolutionist before Darwin" who "had taken it for granted that there was a steady progress of perfection in the living world." According to Mayr, "This belief was a straight-line continuation of the (static) concept of a scale of perfection, which was maintained even by the progressionists for whom each new creation represented a further advance in the plan of the Creator." Mayr goes on to note that the concept of progress to perfection has as one of its latter-day proponents Teilhard de Chardin, who thus derives his impetus from pre-Darwinian thought, while warmly supporting Darwinism as a symbol.

Although the Darwinian revolution is a movement that actually began about 250 years ago and is much more complex than the simple models of scientific revolutions proposed by T. S. Kuhn,³ according to Mayr,⁴ the history of the idea of "progress of perfection" is much older. John Passmore, a philosophy professor at the Australian National University, has just published a book for which the title *The Perfectibility of Man* was inspired by a quote from D. H. Lawrence: "The Perfectibility of Man! Ah, heaven, what a dreary theme!" Passmore's scope includes "Progress by Natural Development from Darwin to Teilhard" (chap. 12) but it is much broader.

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In his own words, "My theme is a vast one, and I have traced it through three thousand years of man's intellectual history, from Homer to the present day."⁵

Passmore's project covers virtually every ancient source that might have a bearing on the subject of nature and nurture, but as in the older instances, it appears that he has posed the question "Is man perfectible?" outside of the issue regarding the survival of mankind, with the result that he does not explicitly ask, "Ought we to attempt the perfection of man?" It must be understood that by the "perfection of man" Passmore is really concerned throughout the book with the lesser goal of "improvement of the human condition" and particularly with the philosophic history of the idea.

In his section on "Perfecting by Social Action," Passmore comes closest to the nature and nurture problem. He opens the section as follows:

Pelagius and Augustine agreed on one point—the alternatives were clear, at least at the extremes. Either man could perfect himself, by the exercise of his own free will, or else he could be perfected only by the infusion of God's grace. These were the poles between which Christian controversy fluctuated. In the seventeenth century, however, a third possibility began to be canvassed, cutting across the ancient quarrel between Pelagians and Augustinians. Perhaps men would be perfected not by God, not by the exercise of their own free will, not even by some combination of the two, but by the deliberate intervention of their fellow-men. [P. 149]

—in other words, by what is meant by the word "nurture," in the present context.

He sums up this section in the following words:

Beginning with the Renaissance, but with increasing confidence in the seventeenth century, men began to maintain that in their relationships to their fellow-men rather than in their relationships to God, lay their hope of perfection. "Perfection" was defined in moral rather than in metaphysical terms, and came gradually to be further particularized as "doing the maximum of good." It was no longer supposed that in order to act morally men must abjure self-love; self-love was harnessed to the improvement of the human condition. "Perfectibility" meant the capacity to be improved to an unlimited degree, rather than the capacity to reach, and rest in, some such ultimate end as "the vision of God" or "union with the One." If men are to be able to perfect one another without divine assistance, however, it has to be presumed that they are not invincibly corrupt. Hence perfectibilists, following in Locke's footsteps, rejected original sin. Indeed, they agreed with Locke that men have no inborn moral tendencies, no innate tendency to act well or to act badly, but only a tendency to pursue pleasure and avoid pain. [We will question this simplistic view later.]

This new "moral psychology" opened the way to the suggestion that men could be to an infinite degree improved by the use of appropriate social

mechanisms—in the first place, education. Education, Locke suggested, consists of forming moral habits in children by associating certain of their activities with pleasure, especially pleasure in the form of commendation, and others with pain, especially in the form of blame. Hartley developed Locke's innovations into a systematic perfectibilism by working out in detail an associationist psychology, according to which men could be not only educated but re-educated to any desired pattern.

In the twentieth century "behavioural" psychologies have taken the place of associationism, but the fundamental assumptions remain. Innate differences are unimportant; men can be moulded to any desired shape by employing the appropriate psychological procedures. The road to infinite improvement lies open, on this view, to man: the only question is whether he is prepared to seize the opportunities which psychological science now offers him. [P. 169, italics added]

Here, certainly, is the epitome of the emphasis on nurture in improving the human condition, and a glimpse of the background that seems to have led to the views of B. F. Skinner in our time.

Passmore also reviews the genetic approach to perfectibility, using H. J. Muller as the protagonist and P. B. Medawar,⁶ with whom Passmore agrees, as the antagonist. Thus Medawar notes, "There seems to be no doubt that some large part of human fitness is vested in a mechanism which provides for a high degree of genetic inequality and inborn diversity, which makes sure that there are plenty of different kinds of human beings. . . . This fact sets a limit to any purely theoretical fancies we may come to indulge in about the perfectibility of men."

Passmore concludes:

To achieve perfection in any of its classical senses, as so many perfectibilities have admitted, it would first be necessary to cease to be human, to become godlike, to rise above the human condition. But a god knows nothing of love, or science, or art, or craft, of family and friends, of discovery, of pride in work. And can we really count as perfection a condition which excludes all of these, for the sake of eternity, of order, or of unalloyed enjoyment?

In spite of these reflections, which might lead us to reject perfectibilism in any of its forms, it is very hard to shake off the feeling that man is capable of becoming something much superior to what he now is. This feeling, if it is interpreted in the manner of the more commonsensical Enlighteners, is not in itself irrational. There is certainly no *guarantee* that men will ever be any better than they are; their future is not, as it were, underwritten by Nature. Nor is there any device, whether skillful government, or education, which is certain to ensure the improvement of man's condition. To that extent the hopes of the developmentalists or the governmentalists or the educators must certainly be abandoned. There is not the slightest ground for believing, either, with the anarchist, that if only the State could be destroyed and men could start afresh, all would be well. But we know from our own

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experience, as teachers or parents, that individual human beings can come to be better than they once were, given care, and that wholly to despair of a child or a pupil is to abdicate what is one's proper responsibility. We know, too, that in the past men have made advances, in science, in art, in affection. Men, almost certainly, are capable of more than they have ever so far achieved. But what they achieve, or so I have suggested, will be a consequence of their remaining anxious, passionate, discontented human beings. To attempt, in the quest for perfection, to raise men above that level is to court disaster; there is no level above it, there is only a level below it. "To be a man," Sartre has written, "means to reach towards being God." That is why he also described man as "useless passion." For certainly man is a "useless passion" if his passion is to be God. But his passions are not useless, if they help him to become a little more humane, a little more civilized. [Pp. 326-27]

But today it is not enough to ask how to become "a little more humane, a little more civilized." To ask merely these questions is to assume that mankind will survive and remain at least as human and civilized as at present without any organized effort on the part of concerned and future-oriented individuals. It is against a background that questions this assumption that we must discuss the problem of nature and nurture. Survival can no longer be assumed.

THE MORALITY OF INTERVENTION

In discussing the ethics of nature and nurture in relation to technology, there is a recurring issue that may as well be faced at the outset and set up as a basis for further discussion. The ethical problem is that of deciding when to intervene in the life of another person and when not to do so. In a simplified form it is a key issue in medical ethics as exemplified in the Latin phrase *Primum non nocere*—"First, to do no harm," a guideline that frequently leads to inaction. It was originally based upon the fact that most "patients" admittedly get well by themselves. The admonition has less impact in the case of the patient who will certainly not recover by himself and for whom no quick and certain therapy is available. This instance is exemplified by the advanced cancer patient, for whom therapy is definitely on an experimental basis and at the level of brinkmanship, with every move a calculated risk. I wish to use this example as a paradigm for the less clear examples that range through a spectrum of situations in the medical field, to the paramedical areas, and finally to the events that touch the lives of all of us either as intervenor or intervener, as in the case of parents and offspring,

teachers and students, or husbands and wives, noting that the roles can be played in either direction in various instances.

The issue of intervention goes far beyond the matter of avoiding harm to the patient, or intervenee, in general terms. It involves the propriety of one individual or of society "managing" or intervening in the life of one individual or group of individuals, even with the best of intentions, and even when requested to do so by the individuals or by society. The problem is to find the line that divides professional service, or friendship, or love in any of its forms from the many custodial relationships that destroy human dignity. This question may seem paradoxical because as individuals we are being manipulated by other individuals and by society using all kinds of technology from the moment of our birth until the moment of our death. Even after death, the disposal of our body may not occur according to our wishes. What is more, we desperately need to be shaped and socialized by parents, schools, and society to avoid becoming mental basket cases. A newborn baby is totally incapable of becoming a human without the intervention of other human beings. Even if it were to be provided with food, hygiene, and shelter, a newborn infant would not *become* a "human" being if the sustenance were provided mechanically. The very thought is revolting, but it would be technologically possible, and because it is technologically possible at the other end of the life-span, it is frequently carried out with the dying patient who could not possibly survive without mechanical aids in place of more personal support, but who cannot *remain* a "human" being with them.

In the case of the dying patient, medical technology, when authorized, cannot easily be withheld. Physicians and relatives are caught in an ethical dilemma in which they frequently expend vast sums of money to prolong a life by all possible means even when all personal contact has been lost, merely because of a conspiracy of silence in which people refuse to make decisions that they have not been prepared for. Society is going to have to develop guidelines for the ethics of intervention not only in the case of the dying patient but also in a number of other stages of life. It would seem to me that an ethical approach would be to regard the use of technology under circumstances that are totally dehumanizing as appropriate only when two conditions are met: (1) the situation is assumed to have a good chance of being only temporary, and (2) the individual has a good chance of living out a substantial fraction of his life-span as an individual after recovery. Since neither these conditions are met in

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the case of the dying patient, the development of further guidelines is advocated.

It is strange that medical technology may be overemployed for many dying patients at the end of a long life-span (provided his relatives can afford it) but underemployed in the case of the patient in the prime of life who cannot afford the technology that could prolong his life. The patient with failing kidneys is a classic example in this category, although others could be cited.

If the patient can be helped by technology to live and function in terms that are acceptable to him, society should help him bear the burden, but whenever he is convinced that his human functions cannot be maintained, he should be given every possible assistance and moral support that will permit him to die with dignity and not be saddled with the impression that suicide is inherently sinful. This line of thought can be applied to a number of other human situations.

The ethics of nature and nurture from the medical standpoint is perhaps most poignant in the case of the mental patient vis-à-vis the role of psychiatrists, relatives, and friends. There seems to be considerable confusion as to what extent a psychotic or mildly neurotic patient should be managed and to what extent he should be left to his own resources. With the advent of the new drugs, the situation has become complicated by the aggressive advertising of some sectors of the pharmaceutical industry, in which physicians have been urged to prescribe tranquilizers for patients who are bothered by what some would consider the ordinary problems of daily living. For example, the woman who cannot communicate with her daughter-in-law, or the coed newly arrived at a big university. The situation has degenerated to the point that editorial comment citing the above examples recently appeared in the prestigious *New England Medical Journal*.⁷

Psychiatrists in general have attempted to avoid telling a patient that it is his duty to do this or that (i.e., that he ought or ought not to do so and so). They have taken a strictly neutral position on what would seem to be valid ethical issues. Only a small minority of psychiatrists have taken the position that many patients might be desperately calling for advice and guidance rather than for just a technological fix in a capsule that would make them less sensitive to their environment. The alternative to the chemical fix is nearly always an attitude of cultural relativism which decrees that the patient must choose his own standards of conduct and his own value system. However, the chemical fix should not be rejected out of hand. There must be many valid instances in which the proper

combination of chemical fix and appropriate counseling will actually increase the ability of an individual to be a human being. But someone will have to decide for him. Instead of questioning some value systems and exalting others arrived at by an ongoing multi-disciplinary dialogue to help make such decisions, we find a conspiracy of silence in which religion and science have forced psychiatrists, teachers, and parents into a cultural *laissez faire* that casts youth, students, and troubled adults adrift in the turbulent stream of life.

THE ROLE OF CULTURE

Cultural *laissez faire* can be deplored at the same time that cultural pluralism is advocated. The two concepts are not synonymous or analogous. Clifford Geertz has emphasized the role of culture in his article entitled "The Impact of the Concept of Culture on the Concept of Man."⁸ He has proposed two very important ideas that must be emphasized and upheld if we are to argue against cultural *laissez faire* on the one hand and uphold cultural pluralism on the other. Geertz proclaims as broad generalizations the ideas that (1) culture is best seen not merely as complexes of concrete behavior patterns (customs, usages, traditions, habit clusters as described ad infinitum in *The Golden Bough*) but as a set of control mechanisms (plans, recipes, rules, instructions, or "programs" in the language of computer engineering) for the governing of human behavior, and (2) man is precisely the animal most desperately dependent upon such extragenetic, outside-the-skin control mechanisms, such cultural programs, for ordering his behavior. Geertz emphasizes the view that culture is not something added on to a finished or virtually finished animal in the evolutionary sense, but that the slow, steady, almost glacial growth of culture over a million years altered the balance of selection pressures for evolving man in such a way as to play a major directive role in his evolution. The increasing reliance upon systems of significant symbols (language, art, myth, ritual) for orientation, communication, and self-control all created for man a new environment to which he was then obliged to adapt. Thus, in examining nature and nurture we find that man's nature was evolving according to the pressures of his nurture, which included all of the components of his culture. Today we must ask what *ought* our culture do to increase the human use of human beings so that they will begin to approach the realization of their individual potentialities. But at the same time we must ask what *ought* society do to develop such a culture, and what *ought* some of us do as individuals

to help society develop such a culture. So we are back to Passmore's theme—the perfectibility of man, which we agree is limited by the imperfections of society. But instead of regarding culture as one of the givens in the relationship of nature and nurture, we now must ask “What must a culture do to survive?” and “How can a culture be changed to increase its chances for survival?” In the ensuing dialogue we make the assumption that survival is desirable and that attempts to promote the widespread acceptance of that view is desirable. We will state as a premise that the promotion of a culture that increases the chances of individuals to develop as human beings has the best chances of survival but that this cannot occur in less than several generations.

The question of “What must a culture do to survive?” has been approached tangentially by Daniel Callahan⁹ in connection with a discussion of the ethical problems raised by the rapid “progress” made by the life sciences impinging on the practice of medicine. Callahan refers to culture as a “nurturing context, feeding and shaping us.” He suggests that our culture is not really occupied with the questions “What is man?” “What is the good life?” “What is really harmful and what is really beneficial?” and he correctly, it seems to me, suggests that one function of a culture is to make up for our deficiencies in private wisdom, to allow us to know things with our feelings which we do not by philosophical standards know in our heads. Callahan calls for a resolution of the troubled relationship between ethics and the life sciences, but he concludes that this resolution must occur at the cultural level, not at the individual level. “To build a fresh ethic for the life sciences is to build a culture.”¹⁰ Thus he is led, as I have been, to the proposition that “to be viable, a culture must provide a nurturing ground for the development and enrichment of human life. . . . Most critically, a culture will have to offer ways of meeting some basic human needs, needs which go beyond physical well-being.”¹¹ His list has much in common with the properties I have listed for an optimum environment: (1) basic needs—food, shelter, clothing, space, privacy, leisure, education (moral and intellectual); (2) freedom from toxic chemicals, unnecessary trauma, and preventable disease; (3) a culture having respect for sound ecologic principles; (4) a culture that prepares us for individual adaptive responses; (5) a sense of identity, with individual happiness that understands oscillations between satisfaction and dissatisfaction; (6) productivity that involves commitment to other members of society; (7) an ongoing search for beauty and order that does not deny the role of individuality and disorder.¹² His list of

human needs include (1) a sense of meaning, (2) a sense of community, (3) a drive for values, (4) a drive for integrity, and (5) a drive for some kind of transcendence (p. 8). A somewhat similar list of human needs has also been proposed by Halleck speaking as a psychiatrist also interested in the issue of survival: (1) intimacy—with other people or a group; (2) influence—attention, respect, affection; (3) freedom—autonomy, dignity, individualism; (4) openness to experience—need for honesty; (5) action—need for function; (6) the search for meaning—transcendence, purpose; (7) privacy—as solitude, or as an adjunct to intimacy; (8) hope—as concern for the future; (9) stability—in relation to optimization of change; (10) non-violence—in terms of the preservation of alternatives to violence.¹³ Callahan is primarily concerned with the development of an ethical system “capable of managing the issues thrown up by developments in the medical and life sciences,” but it is clear that he believes that unless such a system (which I would call bioethics) is developed, our culture will not survive.

So what must our culture do to survive? According to Callahan, it must reach some kind of a consensus as to (1) the nature of man, what he is, and what he can become, (2) the extent to which nature (human and nonhuman) can and should be manipulated and controlled (the problem of intervention, discussed above), and (3) the relationship between public and private morality, law, and ethics. Callahan wishes to be able to specify some fixed, normative human nature, by which one might test all proposals to cure, change, or improve man. “One could then say what is human, what is inhuman.” As a beginning he suggests that “man is a rational animal, *and* a culture-builder, *and* a tool-maker.” Callahan’s recurring use of the question as to “What is the normatively human?” and his reference to man as a rational animal are placed in a context that never considers the irrational aspects of nature and of human nature that I have emphasized, the tremendous diversity of human genetic characters, the disorder, randomness, and chance elements in every human genetic and environmental heritage. I agree with Callahan that “some model of nature and man’s relationship to nature stands behind every ethical system as well as specific ethical decisions.” Callahan describes three models of the man/nature relationship which I would paraphrase as (1) man, the master, dominating and overcoming nature, (2) man, the steward over God’s creation, and (3) man, the student-philosopher, turning to nature and to his fellowmen to build a culture that has survival and development as its goal.

Needless to say, my view favors the third model and has led me to the advocacy of a culture that is based on bioethics as a normalizing world view. I believe that, in order for a culture to survive, it should encourage cultural pluralism in most areas but it should avoid cultural *laissez faire*. By this I mean that it should attempt to increase the understanding of the life sciences and life support systems by publicizing what we know and what we do not know, what we believe and what we do not believe, and why. We should attempt to increase the acceptance of honesty, of respect for human dignity and human needs, and of the fact that both nature and nurture combine to make each of us unique. We should recognize that none of us is completely rational all of the time but that together we can be more rational about our irrational tendencies. I am convinced that it is wrong to assume with Locke that men have no inborn moral tendencies but only a tendency to pursue pleasure and avoid pain.¹⁴ I believe that natural selection has produced a much more complicated creature than this simplistic model would suggest, a creature that has firm bonds uniting him with nature in general and with his species in particular, a creature that feels instinctively an obligation to do something for his fellow creatures from day to day, and from this day to some distant tomorrow. This feeling is part of everyone's nature, mixed with and often overridden by other instincts and often overridden by ill-advised nurture. What we must do as concerned individuals is to strengthen those aspects of our culture that strengthen this instinctual morality.

Our culture must recognize the ties between humankind and the plant and animal world. It must foster a morality with a goal that demands the preservation of the natural world so that the human race can survive and develop further along paths that can be imagined today, but which have only a remote chance of being followed unless we change our course. It remains for a few concerned individuals to ask "What *ought* the culture do to survive?" and "What *ought* some of us do to help develop such a culture?" The answer to the first question is relatively easy since it is clear that the preservation of diversity in individual human natures and natures is desirable, but this diversity should not be permitted to include life-styles that lead to irreversible damage to the natural world on which we all depend. The answer to the second question is much more difficult because it is unlikely that a mere continuation of every concerned individual simply doing his own thing is going to culminate in the kind of culture that can survive. Right here, in this and in similar conferences, we ought to declare that the principle of

maximizing culture laissez faire is bankrupt, even though we hold fast to an ideal of cultural pluralism. We ought to agree that some things are more important than others and begin to get on with the task of naming the important things and deciding how to get them woven into our culture.

NOTES

1. Van Rensselaer Potter, *Bioethics: Bridge to the Future* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1971).
2. Ernst Mayr, "The Nature of the Darwinian Revolution," *Science* 176 (1972): 981-89.
3. T. S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).
4. Mayr, p. 988.
5. John Passmore, *The Perfectibility of Man* (New York: Charles Scribner's Sons, 1970), p. 9. This and subsequent quotations by permission of the publisher.
6. P. B. Medawar, *The Future of Man* (London: Methuen, 1960; New York: Basic Books, 1961), p. 53 in the Methuen edition.
7. R. Seidenberg, "Advertising and the Abuse of Drugs," *New England Journal of Medicine* 284 (1971): 789.
8. Clifford Geertz, "The Impact of the Concept of Culture on the Concept of Man," in *New Views of the Nature of Man*, ed. John R. Platt (Chicago: University of Chicago Press, 1962), pp. 93-118.
9. Daniel Callahan, "Living with the New Biology," *Center Magazine* (July-August 1972), pp. 4-12.
10. *Ibid.*, p. 6.
11. *Ibid.*
12. Adapted from Potter, pp. 144-45.
13. Seymour L. Halleck, *The Politics of Therapy* (New York: Science House, Inc., 1971). By permission of the publisher.
14. Passmore, p. 169.