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Lynton K. Caldwell

ENVIRONMENTAL POLICY IN A HYPERTROPHIC SOCIETY

LYNTON K. CALDWELL†

The tendencies of contemporary American society to inordinate and uncontrolled growth are fundamentally incompatible with the objectives of the environmental quality movement, as expressed in the National Environmental Policy Act.[1] Certain short-term, partial, or incremental improvements in environmental conditions may be compatible with unrestricted growth. But the sheer magnitude of the problems created by ever-increasing numbers of people, goods, and services, and the mobile interactions among them, will frustrate all efforts to create or maintain quality environments.

Paradoxically, the science and technology that have made possible the run-away growth of contemporary industrial society have also made possible the environmental quality movement. Men today know, should know, or may know, the consequences of their environmental impacts. Science enables them to learn what is happening; and technology, in many instances, could correct or alleviate the ill-effects of environmental abuse. But technology seldom is adequately applied to protect or enhance the environment. Equally in free-enterprising or socialist societies, technology is applied only when, in some sense, it pays someone to apply it. The payoff is usually economic; other possible payoffs—in health, safety, esthetics, ecological stability, and the continuing renewability of resources—being unperceived or discounted by most people and their political leaders. And there are also serious problems of man's environmental impacts for which technology has no apparent answers. Unending expansion of human populations and technologies entails an inexorable overstressing of the biosphere which no perspective technology can overcome.

The obvious explanation of this paradox is that science and technology have been applied toward the realization of goals and ambitions that have not been subjected to scientific scrutiny. Science has been commandeered to serve purposes that scientific analysis might reveal to be dangerous, improvident, or self-defeating. These negative aspects of applied science (of "pesticides" for example) characteristically affect men in the aggregate, often gradually, and only acutely at some future, and usually imprecise, point in time. Mean-

†Professor of Political Science, Indiana University; Chairman, Commission on Environmental Policy, Law, and Administration of the International Union for Conservation of Nature and Natural Resources.

1. 42 U.S.C. § § 4321-47 (Supp. V, 1970).

while, the government, the political party, the corporation, the local community, or the individual may "benefit" from action that poisons, degrades, or impoverishes the environment. Individuals do not readily see the harmful consequences of science applied to human purposes in agriculture, manufacturing, medicine, and transportation.

To object to the effects of hypertrophic affluence is widely condemned as self-centered ill-taste. Those who would contain growth are reminded that there are fifty million poor people in America who need more, not less, of everything. Many political "liberals" and free-enterprising businessmen find themselves agreeing that selfish environmentalists want to create an ecologically ordered world at the expense of the poor. Efforts to preserve open space and endangered wildlife, to conserve scenic beauty, and to prevent pollution are attacked from both "right" and "left" by critics for whom unqualified procreation and material consumption comprise all that is important in life.

In the technological society, the demands of ordinary people upon their environments exceed those of pre-industrial monarchs. The self-indulgent, materialistic, mass consuming society of democratic America proclaims every man a "king" and every woman a "queen." But the monarchial prototype is neither sober, hard-working Frederich William of Prussia, nor urbane, philosophic Marcus Aurelius—it is the "I'll take mine now and to hell with the consequences" Bourbon Louis XV, who, however, had the prescience to declare *"Apres moi le deulge."*[2]

The not so obvious explanation of the failure of society to be guided by the knowledge that science makes possible is that men in the mass are incapable of directing their own destinies. The overgrowth of modern society may, from this viewpoint, be treated as pathological. The hypertrophic society has fallen victim to a social "disease," an "endocrine failure" followed by run-away metabolism and accelerating growth.[3] The negative feedback and homeostatic mechanisms that contain and protect a stable self-renewing society have been supplanted by the self-generating impetus of positive feedback. The hypertrophic society embarks upon an ever-accelerating cycle of self-stimulation; development feeds development, growth

2. The consequences of the fusion of hedonism, individualism, and equalitarianism in the dominant ethos of contemporary America have been analyzed at length by A. Hacker, The End of the American Era (1970).

3. Leo Marx in an article generally paralleling the analysis presented in this paper, cites several writers and scientists who have developed the concept of malignancy as the characterizing aspect of America's reckless, uncontrolled growth: Marx, *American Institutions and Ecological Ideals,* Science 945-52 (1970).

grows upon growth. The pace of events moves faster and faster—the rate of expansion and change outrunning the capacities of increasing numbers of people to adjust. Disequilibriums, discontinuities, incompatibilities, and conflicts mount. Tension becomes pervasive. Minor disasters and intimations of impending catastrophies disturb the more perceptive observers but have no significant effect upon the headlong rush of "progress."

Technological development increasingly ties the economy into a "total system." Interdependicies increase. The autonomy of the individual is simultaneously increased and decreased, but the fate of the individual is increasingly bound-up with the fate of mass society. The farmer and frontiersman of America's past could make their own accommodation with nature; the multi-millions of contemporary America cannot. If their man-managed systems fail, many, perhaps most, of them will shortly meet Malthusian fates. Although these systems are visibly becoming more vulnerable, few people perceive them as less reliable than the systems maintained by nature. The city water main seems more reliable than the river which man has rendered unfit for many uses.

Unfortunately for the reliability of man-managed systems, societal hypertrophy is accompanied by social tensions and antagonisms. As with John B. Calhoun's rats, social war seems endemic in the situation.[4] As hypertrophy approaches advanced stages, the self-destructive tendencies inherent in the disease become evermore apparent. There may be a point beyond which the disease is fatal. Whether this point, if it exists, has been passed in contemporary societies cannot be determined by any analysis now available. There are observers, however, who believe that this point has been passed by more than a quarter-century and that nothing can avert the collapse of existing social structures over large areas of the earth. Whether this "collapse" is gradual and sporadic, or whether it may come as a sudden crash, cannot be foreseen. The internal weakening of the social structure that supports the system may be occurring progressively while a society achieves such hypertrophic triumphs as the SST, the John Hancock Building, and a trillion dollar GNP. Then, suddenly the "structure" begins to falter, the society is unable to mobilize its resources for a remedial response, failure of critical aspects of the life-support system follows rapidly, and the social system collapses into a state of chaos.

Socio-ecological bankruptcy, if and where it occurs, does not necessarily imply the total dissolution of society nor the end of civilization. But a reconstituting of the society would necessarily

4. *Population Density and Social Pathology*, Scientific American, Feb. 1962, at 139-48.

follow; no aggregation of people can live for long in anarchy. The artificial systems that modern technology makes possible must continue somehow to be operated if the lives of large numbers of dependent people are not to be forfeited. Under the more probable conditions following socio-ecological collapse, this restoration would be highly authoritarian and be backed by the summary use of force with the involuntary acquiescence of the threatened and frightened survivors.

This gloomy scenario is not a prognosis for all societies in the modern world. René Dubos may be right in foreseeing the gradual adaptation of men to progressively worsening ecological conditions. Those societies in which populations have not outrun adequate supplies of uncontaminated food and water, and in which concentrations of populations are not so large as to be totally dependent upon the uninterrupted functioning of mechanized supply systems, might effect a gradual correction of course that with watchfulness and enforced restraint might lead in time to self-sustaining stability. Hypertrophic societies, however, suffer from a malignancy rather than from the chronic degenerative diseases of ecological deterioration pervasive in less-developed countries. The ever growing complexity and vulnerability of megalopolitan conurbations such as a greater Tokyo, London, or New York increases the possibilities of sudden, disastrous breaks in their life-support systems. The effects of sustained deprivation of water, food, electricity, or police protection from the hypertrophied megalopoli of the late 20th Century has yet to be observed. Experiences in cities under attack in World War II are not in most cases relevant.

For a variety of reasons, a concomitant (and contributory cause) of socio-ecological collapse is social war. In European cities under siege during World War II, notably London and Leningrad, external threat united the beleaguered inhabitants to self-sacrifice, cooperation, and support of the civil and military authorities. Sabotage could receive summary treatment; but a city under siege from within, unremittingly harrassed and disrupted by guerrilla tactics, and pervaded by massive disaffection, disloyalty and distrust, presents an utterly different case. Life in London under air attack was grim but hopeful, touched with a feeling of heroic struggle. Life in a megalopolis, corrupted by seemingly hopeless ecological decay and laid open to unpreventable sabotage by unidentifiable individuals could rapidly become insupportable. The antagonisms within the undigested ethnic mix of great American cities makes them especially vulnerable to this type of disruption. The attitudes, assumptions, and behavior patterns of modern Americans greatly complicate their

coping with circumstances of this character. Remedies in any direction would require changes in American society that appear to be beyond the bounds of probability. The slim prospect of spontaneous remission should not be ruled out, but there is greater probability that societal hypertrophy will run its destructive course, and that the historical continuity of American society will be broken before the end of the century.

Objectors to this prognosis of "decline and fall" may argue that, if one must indulge his fancies in so gloomy and "un-American" a direction, he ought also to consider whatever preventive measures there may be to avoid or mitigate disaster. And "what boots it with incessant care" to try to save the environment of a society inexorably headed for destruction? One's response may depend upon his acceptance of a moral imperative. That imperative is based upon two propositions: First, there is neither justice nor wisdom in presumptuousness, in professing certainty where one cannot be sure; second, the essence of human dignity, for the individual and for society alike, is to live so that if disaster comes, its advent will have been undeserved. We may paraphrase the words of the Spanish philosopher Unamuno who, paraphrasing Etienne de Sénancour, wrote: "And if it is nothingness that awaits us, let us so act that it shall be an unjust fate."[5]

To these propositions a third may be added: He who wills the end must will the means. One does not truly will the attainment of a healthful, self-renewing, self-correcting society unless he wills the means to its attainment. Those who, genuinely desire an ecologically sound society, but act as though "wishing would make it so," are guided by no moral imperative. They invite the contempt of anti-conservationists who rightly discount the effectiveness of individuals who are merely indulging their esthetic sensibilities. Those who would effect a cure for malignant societal hypertrophy, and its concomitant environmental effects, must look at his task with a goal-centered objectivity comparable to a physician attempting to arrest disease. Cure may be inconvenient, expensive, and painful. Where many individuals are involved; and where capabilities fall short of needs, choices may be required that, from some perspectives, may be unjust. Few people, and almost none in public life, will admit in theory what they acknowledge in practice—that choices in life are rarely between the just and unjust, but are almost always among varying degrees and conditions of injustice.

To acquiesce in the present dominant trend of society will effect the great injustice of condemning the entire society to environmental

5. Miguel de Unamuno, The Tragic Sense of Life in Men and Peoples 263 (1926).

degradation and ultimate societal collapse. But effective countermeasures entail their own lesser injustices, and these should be honestly faced and alleviated so far as consistent with the larger purpose. But the effort to create an ecologically viable society should not be constrained by demands that it adhere to standards of justice and equity that present societies have never observed. This is not to say that the ends justify all means, it is merely, frankly, to recognize that all of the choices available to us are in various ways painful. One may suffer pain from an automobile accident and from surgery, but the latter may be understood as controlled or purposeful pain, a regrettably but unavoidable consequence of an effort to save life. Environmental administration that is effective in today's world entails this kind of pain, but democratic society, unlike the voluntary patient, has not committed itself into the hands of doctors who would cure it. Nor, in the opinion of some otherwise hopeful observers, is it likely to do so until "stampeded" by hysterical reaction to ecological catastrophe. By then, the time for cure may have passed, but from among those who personally survive disaster may come forth the architects of a new social order.

What manner of men would be required for this task? Their counterparts, uncommon anywhere, are especially inconspicuous in contemporary society. They will be men of a renaissance perhaps more profound than that initiating the beginning of modern times. Collectively, they will need to embody the qualities of mind and outlook represented by Machiavelli, St. Francis, and da Vinci. Other-directed exemplars of the Great Society will not do for tasks that must actively involve real people but cannot be guided by anticipations of public opinion. Extrapolation of present styles of political leadership into the future can only lead to the conclusion that it is futile to expect effective leadership toward a reconstruction of social values, priorities, and institutions. The type of politics that has, heretofore, prevailed has not prevented and, at least in part, is accountable for the environmental crisis that is impending. Political leadership of the conventional sort cannot realistically be expected to guide the way toward remedial measures.

To meet and surmount what he calls the world crisis of transformation, John R. Platt calls for the large-scale mobilization of the intellectual resources of the Nation.[6] He suggests task forces made up of scientists and other citizens from all sectors of society. He offers a method for determining priorities for investigation, using a classification of problems and crises by estimated time and intensity. But he provides no program for putting this effort into effect.

6. Platt, *What We Must Do*, Science 1115-21 (1969).

Declaring that the only possible conclusion to an assessment of the difficulties of modern society "is a call to action," he asks:

> Who will commit himself to this kind of search for more ingenious and fundamental solutions? Who will begin to assemble the research teams and the funds? Who will begin to create those full-time interdisciplinary centers that will be necessary for testing detailed designs and turning them into effective applications?[7]

Answers to these questions do not come forth because Platt's crisis of transformation, of massive, accelerating change, is accompanied and partially caused by a crisis of mind and spirit, of will and rationality.[8] To speculate beyond how the technical or behavioral problems of man-environment relations might be attacked, brings one to a level of discourse upon which few scholars are willing to enter. This is the level of social theory, hitherto largely the domain of philosophers and reformers. Modern social science has penetrated the area at a few peripheral points, but the data and methodology of social science in its present state have not been adequate to answer the big questions concerning the behavior of societies. For this reason no one can be sure of the course and consequences of the environmental quality movement. Conjectures concerning possibilities point toward conclusions that appear to be either utopian or threatening to important sectors of present society. To illustrate the point, three possible courses for environmental policy will be indicated, each in its own way ungratifying.

The first possibility, predicted by critics of "environmentalism," is that the public will not accept the constraints and self-denials necessary to cope with environmental degradation. This outcome is widely prophesied by spokesmen for business enterprise, for technological innovation, and for the poor. This "realistic" assessment is resigned to the inevitable attrition of natural environments. Human adaptability and technological innovation are counted upon to overcome effects in the environment that are harmful to society, and there is often doubt expressed that conditions are really as bad as ecologists would have us believe. Spokesmen for this viewpoint remind us that man has survived great ecological catastrophes caused by nature, citing volcanos, earthquakes, and floods; and they ask rhetorically how society has been hurt by the extinction of the passenger pigeon and the dodo bird. This projected course assumes little change in present attidues or practices: reasonable control of pollution, yes!

7. *Id.* at 1121.

8. Caldwell, *A Crisis of Will and Rationality*, Environmental Education 1970, at 18-19 (1970).

but no! to measures that would seek an idealized static environment at the cost of economic growth and technological "progress."

The second possibility, held by the more optimistic environmentalists, is that people can, and will, change when they understand the situation. From this viewpoint, education and new laws may be relied upon to change social priorities and behavior. But this view assumes that people *will* be moved by information to take right action. Unfortunately, experience offers little support for this assumption. Knowing and believing are two quite different states of mind. "Deductions," as Cardinal Newman observed, "have no power of persuasion. . . . Many a man will live and die upon a dogma: no man will be a martyr for a conclusion."[9] To change people through education may require strategies and methods not available to formal schooling in pluralistic or democratic society. Knowledge in itself cannot be relied upon for action. Linked to a purpose toward which a coherent plan of action is programmed, knowledge may have a powerful reinforcing effect. Thus, the expectation of voluntary social acceptance of environmental quality goals implies the rise of an action-oriented ideology, a system of belief in which knowledge is joined to moral conviction. Until an imperative toward environmental quality motivates society sufficiently to force action, John Platt's questions are unlikely to receive adequate answers.

A third possible course combines elements of the two preceding propositions: first, that the society will not pay the price of environmental quality and, second, that knowledge, although an essential element of environmental action, will not in itself induce action. The third possibility is that public opinion will fail to arrest man's headlong rush toward ecological disaster and that, in consequence, a demoralized and distraught society will belatedly accept environmental policies that would be rejected under less compelling circumstances. This eventuality would imply the emergence of a coherent, action-oriented ideology for man-environment relationships and a leadership group, an elite, ready and willing to do whatever may be required to put society on course toward ecological solvency.

How this outcome would relate to the values and practices of liberal, representative democracy, as it has been understood in North America and Northwestern Europe, is also conjectural. To the extent that consensus existed regarding the quality of life and environment, the course of societal restructuring would be eased. But let there be no mistake, the events and conditions attending ecological catastrophe may not be conducive to sweet reasonableness or regard for all interests and values affected. Studies of ecological disasters under-

9. John Henry Newman, Discussions and Arguments on Various Subjects 295 (1897).

taken at the Hudson Institute encourage the belief that man may survive circumstances of severe environmental stress, but they would not support the confidence that survival could occur under business-as-usual arrangements.[10] Man-made eco-catastrophes may be far more widespread and severe than any natural events that have yet occurred in history, and their impact could be especially severe if it fell upon densely populated, highly interdependent megalopoli. A considerable displacement of traditional human rights by new rights and obligations would probably occur. Several major sectors of the economy would disappear or be thoroughly transformed.

Most Americans, and perhaps most people everywhere, would probably prefer that such transformation be orderly, gradual, and predictable. But this preference does not reflect the way in which societies normally change directions or alter course. Duress has been the most reliable mover of men. If some major restructuring is required for the solution of environmental problems, the previous structure must be reoriented or reorganized so that it does not obstruct or retard the development of the displacing system. In a democratic society, this task can most easily be performed if and when the established system is threatened with collapse from internal stress. The constructive reorientation of society along ecologically rational lines would not be easily accomplished at any time, but conditions of extreme social disorder would be especially unfavorable. But it may be that the established way of managing the economy would have to be weakened to a point at which the "public" and its political representatives be prepared to revise priorities and to consider alternative ways of managing the nation's economic and political affairs. Realization of the need for fundamental institutional and behavioral changes probably will require more than intellectual conviction. For the mass of men, experience may be the only convincing teacher. Even for the best informed, an emotional impetus is needed to reinforce the knowledge that man's behavior in relation to his environment must change. As James V. Neel has well said: "To some of us, this realization carries with it the need for a philosophical readjustment which has the impact of a religious conversion."[11]

Fortunately, representative democracy contains the potentiality of self-correction. Socio-ecological collapse does not seem to be an inexorable end for the hypertrophic society—at least its probability

10. J. Ingersoll, Historical Examples of Ecological Disaster, Part I, HI-242-RR/A 2-3 (1963) and Part II, HI-303-RR/A 1-2 (1964) (on file at Hudson Institute, N.Y.). *See also* R. Ayres, Special Aspects of Environment Resulting from Various Kinds of Nuclear Wars, Part III, HI-388-RR, ch. 4 (Nov. 30, 1964) (on file at Hudson Institute, N.Y.).

11. *Lessons from a Primitive People,* Science 819 (1970).

cannot be proved, and the art of political leadership in our time should be directed to insure, as best we may, that does not occur. All social and political systems change, and the constructive task of politics is to speed the transformation of the present system into a more stable and self-renewing society. The task is to cure the patient of the "disease" of societal hypertrophy, not to eliminate the symptoms by killing the patient. And, if in spite of our best efforts, we are unable to avoid disaster, some moral satisfaction may be gained by the knowledge that our failure was not a failure of nerve or will. If man is inherently unequal to the task, the outcome may be tragic; but it will be neither disgraceful nor absurd. To blunder into ecological disaster through the hypertrophic tendencies now in momentum, would be both.