

Towards an environmental ethic

How should decisions concerning the environment be made? Eric Ashby, examining recent work on the subject, offers his view

IN 1961 there was published in Washington a report under the modest title House Document 522. It ran to eleven volumes. It was prepared by the American Army Corps of Engineers. Its theme was a Comprehensive Survey of the Water Resources of the Delaware Basin. The report recommended that a dam should be built on the Delaware River at a place called Tocks Island in New Jersey. The dam would create a lake about 37 miles long. The estimated cost (when it was reviewed at 1975 prices) was about \$400 millions.

House Document 522 includes a massive exercise in cost-benefit analysis. The recommendation to build a dam rested on four arguments: to diminish the danger of floods downstream; to provide a water reserve in case of drought; to run a hydro-electric power plant; and to create a recreation area of 72,000 acres which would attract (according to the first estimate) as many as 9 million visitors a year. These potential visitors were regarded as a substantial "benefit" in the cost-benefit analysis, on the assumption that they would be worth \$1.35 per person per recreation day.

Of course the proposal generated massive opposition. Some of the quantified values were challenged, but the most powerful arguments against the proposal rested on unquantified values: desecration of the last free flowing river in the east of the USA; acres of wilderness alienated for roads and parking lots and motels; the plea that this beautiful part of the river should be treated as an endangered species. It is a debate familiar to us in Britain. We had something like it over the Cow Green reservoir in Upper Teesdale in the 1960s.

The dam is not yet built, nor at present is it likely to be built. But the fifteen-year-long controversy over it has produced one admirable and important second order consequence. It prompted the American Academy of Arts and Sciences to sponsor a study of the problems of decision-making about the environment. The prime problem is how to incorporate what the study calls "fragile" values into the "hard"

values which can reasonably be quantified. For over four years a group including lawyers, scientists and philosophers have reflected on this issue. Their conclusions are now issued in a book* which is, I believe, the first serious and authoritative work on the philosophy of environmental protection. Its starting point is the Tocks Island controversy, which is going to be treated intensively in a second volume to be added to this study¹. But the reflections go far beyond that specific episode. In essays, all of which are careful and one or two of which are brilliant, the nine authors set out their attitudes to the conflict of values which is the inevitable dilemma facing those who have to make decisions about the exploitation of the environment by man.

The impressive feature of the book is that it does not reach a consensus; it does not offer formulae for decision-makers. Its authors have the courage to declare that there is no simple resolution to the question: how do you reconcile the protection of nature with the needs of industrial man? It eschews slick and glossy utopias. It was J. S. Mill who wrote that the test of good government is the degree to which it increases the sum of good qualities in the governed. All the authors agree that there are values about the environment which are "good" and values which are "bad". But, as Robert Dorfman writes in the last essay, "I do not believe that those questions can be answered definitely, now or ever; but neither can they be ignored. The progress that I see in our project is that it points the way to living honestly with these forever open questions".

In Britain those who make decisions about the environment are no longer philistines. The main difficulty about "soft" or "fragile" values is not that they are neglected in the decision-making process; it is, as Harvey Brooks writes, "bringing them into a common intellectual framework with the rest of the analysis" for the purpose of political decisions, where "hard" quantified data based on cost-benefit analysis is likely to be more easily accepted. One of the redeeming features of the consumer society which has to be put in the balance against its many ugly features is that "fragile" values do play an increasingly important part in political decisions about the environment. In the files of the Department of the Environment there are many examples of planning permissions being

refused because unquantified values were deemed to carry greater weight than quantified ones.

This is encouraging, but it does not dispose of the difficulties which arise when there is a conflict of values, a clash of "goods" and the necessity to make a choice between them. The American Academy has put us all in its debt by facing these difficulties head on, in the book the Academy has sponsored. Among the issues discussed in the book, two seem to me to be particularly important.

- Values can be compared more easily if they can all be expressed in the same units. Does this justify the attachment of a money-tag to all values, even though this means what economists call "shadow pricing" (for example, the "value" of a view of the South Downs is the extra cost of not defacing the view if a road or a line of electric pylons has to be built in the neighbourhood)? Or are the values themselves distorted as soon as you try to put a money-tag on them?

- Is it possible to declare certain clear ends or goals in environmental policy, and to accept these ends as "given"—"axiom values", as it were—so that all decisions about the environment become means toward unalterable values which are the ends?

In a closely argued and subtle essay, Laurence Tribe tackles both these issues. He dismisses one common criticism of cost-benefit analysis of environmental problems: the criticism that to quantify "fragile" values (a view, a rare plant community, a river in its natural state) is *illogical*. All such concerns "can in theory be incorporated into a rigorous analysis . . ." The danger of incorporating them, of putting price tags on elusive externalities, is more subtle. It is twofold. First, it flattens any sense of obligation toward natural objects into an aspect of self interest ("What is its money value to me?"). Second, it exerts "an enormous reductionist pressure on all values that would otherwise seem incommensurable with a calculus of human wants." In other words, the very translation of the values into manageable units may deprive them of their significance. Tribe's essay, and others in the book, particularly the essay by Harvey Brooks, are a great encouragement to the decision-maker when he is presented with a tidy and misleadingly comprehensive assessment of some project which will have an impact on the environment, neatly distilled into cost-benefit equations. The decisions he has to make, writes Harvey Brooks, "are fundamentally

*Tribe, L. H., Schelling, C. S., and Voss, J. (Eds.) *When Values Conflict* (Ballinger, Cambridge, Mass., 1976). To be published in the UK by Wiley.

¹Feiverson, H. A., Sinden, F. W., and Socolow, R. H. (Eds.) *Boundaries of Analysis* (Ballinger, Cambridge, Mass., 1976). To be published in the UK by Wiley.

political in the sense that they ultimately involve competing or conflicting values, and therefore cannot be resolved by purely 'rational' (that is, empirical and logical-deductive) means."

If this view is accepted, there remains the problem of how values are to be incorporated into analysis if they cannot be quantified, or related to self interest. To the question "Does nature embody values apart from its usefulness in serving man's desires?", the answer seems to be, "Yes, but we are not clear, and cannot expect ever to be clear, what these values are." So Laurence Tribe proposes a fresh attitude to this issue. He concedes that most people are very vague about the values they hold on environmental matters and that "such inchoate values are crystallised into distinct preferences or criteria of choice only through the concrete process of seeking means to attain them and gradually discovering what such means entail." In other words, values evolve through the choices made in groping toward them, and it is an essential aspect of freedom that we can choose what we shall value.

The direction in which this argument leads is as follows. First, there are no sanctified principles upon which environmental decisions rest, no "axiom values"; but all decisions are rationalised in some provisionally held principles, and these provisionally held principles *evolve* in the light of the choices which are made and the observed consequences of these choices. (Consider, for instance, how our values about pesticides have evolved through experience of making decisions about the use of pesticides.) Second, the direction in which principles evolve in our attitude toward the environment is taking us beyond the crude criterion of self interest—witness the recent legislation in Britain to protect some species of wild animals and plants, so rare that not one in a hundred of the legislators is likely ever to have seen any of them! It is this sort of argument which leads Laurence Tribe to

suggest that social values about environmental issues progress in a spiral (their direction depending upon their position in the spiral; a framework for choice, as he calls it, which "must incorporate procedures for its own evolution.") And as a starting point on the spiral, Tribe suggests that we "should avoid a premise of human domination—or indeed a premise of the total subservience of any form of being to any other."

A feeling of obligation toward organisms other than man and a responsibility for protecting natural objects—valleys, forests, wildernesses—is of course no novelty among individuals. It is the codification of this obligation or responsibility which is novel. Nearly ten years ago, for instance, there was a planning enquiry into the effect which a North Sea Gas terminal would have on an area of natural beauty on the Norfolk coast. It was the Minister of Housing and Local Government who had to decide whether the area of natural beauty would be damaged by the siting of the gas terminal. In a word, he had to act as the "guardian" of the area of natural beauty. This attitude to a natural object prompts one to ask whether natural objects, trees and woodlands, creatures other than man, should have "rights". At first sight this seems to be a sentimental and mystical attitude to nature. But that is not the view of some hard-headed practical lawyers. In 1972 an article by a professor of law in California, Christopher Stone, examined the singular thesis: Should Trees have Standing? The article has since been published as a book, together with judgement from the Supreme Court on the legal case which prompted Stone's article[‡].

The circumstances which brought the action to the Supreme Court were these. The United States Forest Service had granted a permit to Walt Disney Enterprises Inc to "develop" Mineral King Valley in the Sierra Nevada mountains. The decision was

challenged by the Sierra Club, which acts vigorously to defend natural objects in America. The Sierra Club lost its case for a reason which would apply to an analogous case if it were to be brought to the courts in Britain, namely because the Club had no sufficient "personal stake in the outcome of the controversy." But three members of the Supreme Court dissented from this decision, and one of the dissenting judgements, by Mr Justice Douglas, drew its inspiration from Stone's article in the California Law Review. He said: "The critical question of 'standing' would be simplified . . . if we fashioned a federal rule that allowed environmental issues to be litigated before federal agencies or federal courts in the name of the inanimate object about to be despoiled . . . Contemporary public concern for protecting nature's ecological equilibrium should lead to the conferral of standing upon environmental objects to sue for their own preservation."

In his lively essay, Stone examines the way rights in law have been conferred upon children (who have not always had rights in law), women, subject peoples formerly enslaved, and so on. He then reminds us that the "world of the lawyer is peopled with inanimate right-holders: trusts, corporations, joint ventures, municipalities . . ." So there is nothing unreasonable about putting natural objects, as the law puts other non-human things, into the category where their interests can be defended in courts by properly recognised guardians. Of course, before the principle could be adopted, many subsidiary questions (such as: Who should be the guardians?) would have to be settled. But the idea is worth serious reflection for it would be one more step in the evolution of an environmental ethic which does not rest on the assumption that nature is made for man. □

[‡]Stone, C. D., *Should Trees have Standing?* (Kaufmann, Los Altos, California, 1974).

The attack on tropical disease

Alex Dorozynski looks at the World Health Organisation's efforts to relieve man of one of his major burdens

IN spite of recent expressions of concern about the new economic order, interdependence of nations, and co-operation, there is one area of enormous importance to the developing world that has largely been ignored: that of tropical diseases. They affect several hundred million people, represent a permanent human burden, and a major obstacle to development. Tropical disease research has hardly

benefited from the explosion of knowledge in bio-medical sciences that has taken place in the developed world.

In fact, some of the tropical diseases are now recrudescing, because parasites have become resistant to drugs and vectors to insecticides, because agricultural development sometimes contributes to the creation of conditions required for a disease to become endemic, and because international aid

toward the control of tropical diseases has shrunk in the face of increasing costs. In the past year, the World Health Organisation (WHO) has been mounting a new attack on these diseases. The approach is novel, and the outlook promising, although one major element of uncertainty still remains: will there be enough money to carry out this long term programme?

The global annual investment in tropical disease research is estimated by the WHO at about \$30 million, which is a mere pittance of money in comparison to huge budgets devoted to other areas of bio-medical research. Advances in treatment and control of