industrialized nations, but is, in fact, the published papers of a conference held in December 1968 at which the ecological effects of development projects in underdeveloped countries were examined. More than sixty scientists with direct experience in the field attended, and one of the most interesting parts of the book is the verbatim discussion which follows each section. The papers are grouped under such headings as irrigation (including dams); health and nutrition; consequences of increased productivity for (especially the effects of insect pest control); and environmental degradation by other practices. It is often depressing reading; paper after paper concludes with a statement such as: "Because development activities have not been coordinated within a comprehensive ecologic framework, there has been a drastic deterioration in the social and economic conditions of life.'

How is it that elaborate and often expensive schemes can be put into operation and then found to be so disastrous ecologically? The members of this conference in 1968 had to ask whether ecological factors prevent the development of the underdeveloped countries in the direction of increased technological advance such as the developed countries have followed. The implications of such a question for the developing countries might be unacceptable if it were not that serious doubts are growing about the environmental the technologically stability of developed countries themselves. In

terms of ultimate survival those countries not irrevocably wedded to the philosophy of the developed countries may yet prove to be the less handicapped. In Pollute and Be Damned Bourne looks at the environmental damage which is going on in the world. not least as the result of technological development, and asks questions about the basic motives of man and his ingrained disregard of things environmental. Whereas Ecology, Pollution, Environment was an elementary textbook, The Careless Technology a collection of research papers and case studies, Pollute and Be Damned takes the broad view which is essential as a stocktaking, and draws some disquieting conclusions. Man has not yet come to terms with his environment, and, even more basically, with himself as an organism dependent on its environment.

Bourne, a marine biologist, in places overstates his case and is at times in error. Lake Erie is not "completely dead to aquatic life", and not "all rivers ultimately empty their burdens into the sea". In fact, land-locked hydrologic systems constitute some very serious conservation problems, as the paper by Böckh in The Careless Technology shows. Nevertheless, a very consistent picture emerges from Bourne's book. He has had a good deal of contact with the official mind and one can see this so often at the root of the gross errors recorded not only by him but also by many of the contributors to The Careless Technology.

Had The Careless Technology not

taken nearly four years in gestation, some recent outpourings, suggesting that man only has to bend his mind to his present predicament to put things straight, might have been stifled at birth by the repeated examples of failure which it contains. As Bourne puts it: "The genius of modern man is for making mistakes." In all this there is no very obvious sign of that highly successful organism, technological superman. Nevertheless, there is some evidence that we are gradually turning the ship round. In 1956 there was published another great symposium volume: Man's Role in Changing the Face of the Earth (edited by W. L. Thomas and others). In its day this was an eyeopener. Now we have come to realize that the changes have often led to environmental deterioration, and that many adverse effects are being accelerated, not least because of uncontrolled population growth. number of the papers in The Careless Technology give some hope for the future. They imply that we often have the knowledge required to integrate our schemes with the environment, but that at present we rarely do so because ecologists do not have the final say. What is needed is a change of motivation toward the environment-an acceptance that we cannot fly in the face of environmental laws. We are going to need all our technological genius to see us through the environmental problems that face us all over the world. Given acceptance of his dependence on ecological laws man may come through but without that acceptance his very genius could be his undoing.

G. W. DIMBLEBY

Reclaimed Parkland



The Fairground State Park, Duquoin, Illinois, is partly reclaimed after strip coal mining. This picture is reproduced (by courtesy of the National Coal Association) in *Power Generation and Environmental Change*, edited by David A. Berkowitz and Arthur M. Squires (MIT Press, Cambridge, Massachusetts, and London, 1971). \$16.95.

Educational Economics

The Political Economy of Education. By John Vaizey. With Keith Norris, John Sheehan and Patrick Lynch and M. F. Leite. Pp. x+297. (Gerald Duckworth: London, May 1972.) £5.45.

This book, based on a series of international studies which have been financed by the Gulbenkian Foundation, has already been hailed by the *Economist* as a magnum opus. This should not deter those who are not economists from reading it. Professor Vaizey has the enormous advantage of being an economist who knows what he is talking about when he discusses education; which is more, many educationists would say, than can be said for many economic theorists.

It is good to see the old term political economy coming back into use and the political importance of what Professor Vaizey and his colleagues are trying to do can hardly be exaggerated. Chapter eleven shows that for a range of indus-