# Book Reviews

## Cleaning Up

**The Politics of Ecology.** JAMES RIDGEWAY. Dutton, New York, 1970. 224 pp. $5.95.

*The Politics of Ecology* is an attack from the left on virtually all current efforts to tackle pollution problems in the United States. A few quotations may help to convey the tone of the book:

> [Earth Day] provided a cover behind which the ecology interests could wage their struggle for control of natural resources [p. 15].

> The building of the Chicago Drainage Canal marked the beginning of the process which turned the Mississippi River into an open sewer [p. 36].

> Much of the government's anti-pollution legislation is written to benefit Wall Street, which hopes for an increasing market in underwriting sewer bonds [p. 92].

> So regulation, with the Federal Power Commission running the industry's Washington publicity office, becomes a method of manipulating the energy markets [p. 137].

> The Neo-Malthusian doctrine, rising among both the technocrats and the ecologists, functions as a manipulative scheme aimed at controlling the poor in the interests of the wealthy [p. 194].

Parts of the volume make interesting and informative reading, but there is the full complement of inaccuracies and misunderstandings suggestive of haste. Thus in connection with the topic of neo-Malthusianism, Ridgeway makes the valid point that these advocates of pollution control have overemphasized the role of population growth in recent pollution problems in the developed countries. But in the process he leaves the impression that there is no population problem here or anywhere else. Chapters 2, 3, and 4 present a reasonably accurate and coherent discussion of the development of technology and policy with respect to water-pollution control, but the erroneous impression is left that industrial wastes are never subject to biological treatment and that combining municipal and industrial wastes is never an efficient procedure.

In chapters 5 and 6, Ridgeway tries to make a case for the proposition that fuel companies and automobile companies, unwittingly aided and abetted by ecologists and advocates of zero population growth, are engaged in a conspiracy to increase sales of highly polluting fuels and then of pollution-control equipment. In the process he manages to misinterpret federal fuel policies (which few perhaps would care to defend), the technology of fuel production and transportation, and the quantities and estimated reserves of natural gas. His handling of natural gas reserves may be regarded as typical. He asserts (p. 135) that, according to U.S. Geological Survey estimates, "gas reserves in the United States total 3,655 trillion cubic feet" and that "at the present time, total production runs about 20 cubic feet annually." The omission of "trillion" from the latter figure is probably inadvertent. The first figure represents, more or less, "gas in place." About half of this, it is estimated, will be found and ultimately recovered, and "proven reserves" estimated by the American Gas Association and cited by the USGS are 290 trillion cubic feet.

As muckraking, this scattergun treatment, which includes rehashed accounts of ecological disasters (*Torrey Canyon* and Santa Barbara oil spills) and "inside" reporting (what Schultze said to Udall), fails to add anything new. As political analysis the book is equally hollow, for simply calling the principal actors wicked does not help much—and Ridgeway finds everyone wicked, from the technicians to the politicians to the ecologists. The questions that are not asked—Why is it possible for corporations and other special interest groups to capture regulatory programs and turn them to their own interests? What in the incentive system makes people and business enterprises act the way they do?—reveal the poverty of the analysis. Ridgeway's slim conclusions consist largely of the statement that the best way to attack the pollution problem is to control the development, production, and end-use of fuel through government policy and to bring injunctions against industries to make them stop discharging waste to watercourses. The proposals are surrounded by claims that they are truly fundamental solutions. In fact, they are simply a call for more government regulation (which Ridgeway himself has condemned as a failure), and they would require highly moral behavior on the part of technicians, bureaucrats, and politicians whose dishonesty and stupidity Ridgeway has roundly condemned throughout the book. It cannot be denied that the cozy relationships between legislative committee staff, executive office bureaucrats, and industry lobbyists promote the kind of influence peddling that outrages Ridgeway, but such polemics as this will not change anything. Altering the incentive structure might.

What is really needed is a great improvement in our understanding of what in our system of political institutions and economic incentives has caused us to fall victim to severe environmental degradation. Ridgeway's book represents no progress on this at all. He completely neglects the insights which are coming from ecologists, economists, and political theorists. We now know, for example, that overuse of our common property resources could be curbed by charging appropriate fees to dischargers, whether they be industries, municipalities, or agriculture. Such fees, or "effluent charges," can be coupled with standards or outright prohibitions (in the case of some heavy metals) to maintain whatever levels of quality we wish. Leaders of both political parties are working on such legislation, which will change the incentive system under which industry, and all of us, operate.

In similar fashion, the courts are increasingly being used to protect our individual and collective right to a safe environment. Some of the efforts, such as those of Ralph Nader and of the Sierra Club, have been well publicized. Other efforts, for example those of Joseph Sax at the University of Michigan in getting the new Michigan law passed, have received less public attention. A responsible report on the poli-

tics of ecology would have included accounts of these efforts to change incentives through economic and judicial reform. Journalism can be accurate and responsible without pulling punches, as is regularly shown by Luther Carter's writing in this journal.

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## Sociobiological Experiment

**The Pill on Trial.** PAUL VAUGHAN. Coward-McCann, New York, 1970. x, 244 pp. $5.95.

Chronicles of the passing scene necessarily represent some degree of bias; the entire story cannot be told because it is not finished. Indeed each week sees some new development in the field of oral contraceptives, reported almost as frequently in the public press as in the biomedical literature.

A retrospective analysis of progress leading to our current array of oral contraceptives, principally combinations of estrogen and progestogen generically dubbed "The Pill," is no mean task. *Index Medicus* contains citations to a sizable fraction of the world's biomedical literature. Its annual cumulations grew about 30 percent between 1965 and 1969. During the same period the number of references to oral contraceptives tripled, and the number of citations concerned with their adverse effects in 1969 was at least as large as that of all titles on oral contraceptives included in the 1965 compendium.

Thus, Paul Vaughan faced a formidable job in organizing the biomedical sources alone, not to mention the numerous other pieces of information on this controversial subject. He acquits himself well in *The Pill on Trial*, a lucidly written small volume for lay readers. Vaughan is a good storyteller. His long experience with things medical (he has written a history of the British Medical Association and contributed shorter works on medical topics to an array of periodicals) has led to a facility for translating the highly technical jargon of the physician and scientist into a pleasant prose which draws from the different vernaculars appropriate to the occasion. But this work is not based on documentary sources alone. Vaughan has talked with a number of the principals. He quotes them directly so that their precise positions on particular issues are skillfully supported by their arguments. The pros and cons emerge on page after page, but the recurring theme is, "And yet, and yet—the doubts remain," "Nobody can be sure—yet," thoroughly and objectively skeptical.

The story commences in the days before and immediately after World War II with the fundamental observation that some hormones could inhibit ovulation. It gathers momentum with the advent of synthetic progestogens, the reawakening of an old interest in Gregory Pincus at the instigation of Margaret Sanger and Katherine McCormick, and the supportive clinical acumen of John Rock. The first field trials in Puerto Rico and in Britain raised new problems, which are paraded across the stage by a constantly increasing cast of characters. Experiences are faithfully recounted in rather more or less detail than some of the actors might prefer. The cast is large, and its geographical dispersion grows. The pros and cons are argued with scientific objectivity, sometimes with emotional fervor. Determination to obviate the consequences of a rapidly burgeoning population on this terrestrial sphere is aided and abetted by important segments of the world's medical professions and pharmaceutical industries. Known adverse effects of the pill in the form of unquestioned lesions produced in some fraction of its users are described, as are deviations from metabolic and behavioral norms less readily interpretable in terms of health and disease, and finally the potential hazards suggested by animal experimentation. To fortify Garcia's statement, "I have never claimed that the pill is the ideal contraceptive. There can never be an ideal contraceptive. Not unless you believe in Utopia," Vaughan introduces a number of alternative approaches to the problem. His epilogue demonstrates the intensity of feeling which discussion of the pill can generate, in the context of a recent hearing before the Monopolies Subcommittee of the Committee on Small Business, of the United States Senate.

The general public will find a wealth of information in this small volume. The scientific community may better understand from it the complex interplay of interests involved with the development of the pill, and physicians may profitably contemplate some of the characteristics of their profession as perceived by a sympathetic but forthright author.

As for the author's bias:

> The outlook for the pill has become darker. . . . Nevertheless, with all its disadvantages, steroid contraception looks like remaining a fact of twentieth century life for some time: but a fact which will become increasingly difficult to live with, as women continue to take their chance with the pill, though with a greater feeling of unease.
>
> Meanwhile, without always knowing it, . . . twenty million women have been taking part in both an experiment and a gamble. . . .

Meanwhile the trial goes on.

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## Island Epidemiology

**Serendipity in St. Helena.** A Genetical and Medical Study of an Isolated Community. IAN SHINE. With the assistance of Reynold Gold. Pergamon, New York, 1970. xvi, 188 pp. + plates. $10.

St. Helena, a British colony, lies in the middle of the South Atlantic some 1200 miles west of Africa and 2000 miles from the coast of Brazil. It has a population of 4000 to 5000 individuals (4642 in 1956), most the descendants of slaves, indentured Chinese laborers, and past garrisons. Prior to 1815 and Napoleon's exile, the island was of little importance save as a refitting and provisioning point for sailing vessels. The six years of Napoleon's exile brought a brief period of international fame which, however, withered with his death, the opening of the Suez canal, and the replacement of sail with steam and oil. The winter of 1959–1960 witnessed a small turning in St. Helena's recent fortunes, the arrival of a new medical officer, Ian Shine. *Serendipity in St. Helena* is an entertaining, almost enthusiastic account of his introduction to human population isolates and an awakening of interest in their research potential. This small volume traces his involvement from chance observation of a few rare inherited abnormalities to an attempt at a larger and more comprehensive evaluation of the burden of inherited diseases and disability resident in the St. Helena population. He