on the ferry boat, half way between the South Ferry station and Staten Island, facing Manhattan."

Readers searching for meatier fare will not be left standing at the bar. Legislation, vandalism, land trusts, and air quality are only a few of the problems scrutinized. I can't help thinking that the brevity of the articles is an advantage. We get the good ideas without the elaborations, the kernels without the chaff. The book is a tasty salmagundi, one to sample in fits and starts in the same way one might explore the city.

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Consumption and Protection

Horst Siebert, *Economics of the Environment.* Lexington, Mass.: D. C. Heath, Lexington Books, 1981. xii + 230 pp. $24.95.

The environment should be carefully consumed and protected, as should any scarce resource. Conflict over the environment is a direct consequence of competing uses for valuable environmental goods and services. Horst Siebert skillfully demonstrates the usefulness of economic theory in understanding this special allocation problem and suggesting policy approaches. His precise language and appropriate analytical frameworks lend themselves to clear thinking about the use and misuse of the environment.

The book is divided into five parts, the first being introductory. Parts 2 through 5 reflect the broad scope of the book in that nearly every major economic aspect of the environmental problem is covered. Each topic is treated tersely.

Part 2 deals with the static aspect of environmental economics including the following topics: joint production of output and residuals, environmental quality as an input, Pareto optimality, competitive equilibrium, the environment as a public good, benefit-cost analysis, the Lindahl solution, public choice, and property rights. The use of a two-sector model permits discussion of the allocative effects of externalities on activities with different emission intensities. A refreshing aspect of Siebert's presentation is the explicit recognition of the role of the physical environment through inclusion of emission, abatement, diffusion, and damage functions.

In contrast to most of part 2, the section related to benefit-cost analysis is somewhat disappointing. Benefit estimation is considered to be the most challenging aspect of managing the environment, but only six pages are devoted to it. Direct query of consumers about environmental goods is criticized, yet there is no mention of recent work on contingent valuation using iterative bidding games. The phrase *willingness to pay* is often equated with surveys, but values implicit in the demands for housing, jobs, and recreation are also based on individual willingness to pay. More attention could have been given to distributional analysis which considers who receives net benefits from various individual and collective actions.

Part 3 considers regulation, emission taxes, licenses, and cost sharing as policy instruments for environmental control. Siebert relates how producers, consumers, and administrators will react, explores their behavior in a general equilibrium context, and considers the effects of monopoly. His concise description of the cost-sharing arrangement for control of water quality in West Germany, the *Genossenschaften*, is excellent. For those readers particularly interested in policy, this part should be supplemented to deal with decisions which have to be made on the basis of incomplete information about the transfer function, damage function, or valuation of physical benefits. Such uncertainty can lead to nonmarket failure in the form of inadequate environmental policy.

The remainder of the volume distinguishes this book from similar ones, for few contain sections such as those on the spatial (part 4) or intertemporal (part 5) dimensions of environmental management. International topics covered include transfrontier pollution systems and the effects of environmental endowment and policy on comparative advantage, terms of trade, and trade flows. For the two-region case, interregional diffusion of pollutants, and differences in waste assimilative capacity and quality goals as location factors are analyzed. The time element introduces intertemporal externalities, irrevisabilities, and the concepts of optimal extraction and growth rates.

This book, with its extensive bibliography, would make a fine reference work for those who have a background in economics. It would also be useful as a basic text in a graduate course in environmental economics because Siebert provides a solid starting point for many topics which can be pursued in depth through journal readings. The reliance upon calculus and control theory will preclude this book's use in most undergraduate courses. For those who are interested in environmental economics and who are comfortable with these tools for analysis, however, this is a fine book.

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Ownership Threshold

George Sternlieb and James W. Hughes, *The Future of Rental Housing.* New Brunswick, N.J.: Rutgers University, Center for Urban Policy Research, 1981. xiv + 147 pp. $8.95 (paperback).

The future of rental housing as interpreted by George Sternlieb and James Hughes appears bleak. As we move into the 1980s, the demographic profiles of both renters and owners are becoming crisper and more distinct. Owners can increasingly be typified as high-income professionals, usually married. Renters, on the other hand, are more often singles in the lower income brackets, usually nonwhite, with a high proportion of single parents. Due to these household shifts, rental housing will perform a more limited function in the United States in the future.

We are said to live now in a "post-shelter society" for which housing alone is not sufficient. In economically unstable times, "shelter" real estate is seen as an