Pooh's dolorous companion, Eeyore. He is usually much older than most of his colleagues—or at least older than his years—and inclined to small activities in a community where there is slight competition at election time. He speaks of having been "drafted," and vows to quit the legislature after one session. He is the "handcuff volunteer" of military service humor.

It is the Lawmaker, quite predictably, who ranks highest in the author's esteem. He is energetic, confident, debative, often issues-oriented, affirmative and inclined to view politics as "a way of implementing principles, not a violation of them." If he is to be faulted, it is on the grounds that he expects the legislature to "deliberate like Plato's Academy and then take action like Caesar's Army."

The elaborated descriptions and classifications that occupy the four central chapters are most useful because, as the author explains, "there is little dispute any more that we live under a government of *men* as well as *laws*. Yet we have only begun to find out what public office means, in human terms, to those who govern."

A well-made point, but a caveat, please.

The universality of Barber's typology is uncertain. Connecticut, for one thing, belongs to that grouping of states where the economic and educational attainments are most fully developed. Presumably these elements are reflected in the caliber of the state legislators. Moreover, Connecticut has drastically altered its basis of representation in the legislature since the book was written. It would be interesting to return for a comparative survey. Third, the typology would need adaptation in order to accommodate the 535 members of the Congress of the United States.

However, the book is helpful—"a study of politics as a personal experience of the politician," as the author describes it. A description of recruitment of candidates is also informative.

Overall, *The Lawmakers* provides a proper corrective to those who regard a legislature as a Plato's Academy. The book, likewise, provides substance to those who regard a legislature as a Caesar's Army—on either side of the Rubicon.

WES BARTHELMES Office of Senator Robert F. Kennedy, Washington, D.C.

## Hunter Valley, New South Wales, Australia

The Geology of the Hunter Valley. Beryl Nashar. Jacaranda Press, Brisbane, Australia, 1964. viii + 96 pp. Illus. 25s.

This book is described by its author as "a simple text on the geology of the Hunter Valley," which is "meant to excite an interest in a science which is everywhere around us." In many ways the author has succeeded in producing a book that should be extremely useful to students and amateurs in the Hunter Valley area of New South Wales, Australia.

Part 1 is an introduction to geology which explains briefly and in a nontechnical way some of the basic principles and concepts of geology. It is here that most of the book's weaknesses are located. There are no explicit statements of the ideas of uniformitarianism, superposition, or crosscutting relationships of intrusive rock bodies. These are basic principles for the decipherment of earth history and should be clearly explained in any book intended for beginners. The sections on rock types are very incomplete. In the field classification of igneous rocks, the plutonic rocks are omitted, although granite occurs in the Hunter Valley. The statement is made that sedimentary rocks are clastic rocks, a classification that would omit many limestones.

The section on structural geology has virtually no explanation of strike, dip, anticline, and the like, but several clear diagrams are given. Brief explanations of these terms would result in a very good section on structure. The illustrations are generally good. The drawings of the common fossils found in the Hunter Valley are clear and should be usable for identification.

Part 2 is a general account of the geology of the region by areas, with outlines of a series of excursions. This is well done, with detailed descriptions of many geologic features to be seen in each locality. An enormous amount of information is presented, much of it in a manner that illustrates many geologic processes. Geologic maps of each area are given. This is an excellent way to present the geology of a region to nongeologists and to use it to illustrate geologic principles and processes. We could use many books of this type in the United States.

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## On the Efficient Pursuit of Objectives

**Decision and Value Theory.** Peter C. Fishburn. Wiley, New York, 1964. xviii + 451 pp. Illus. \$13.75.

Decision and Value Theory is concerned with the efficient pursuit of objectives. From a mathematical point of view the alternative courses of action may be considered as models or functions relating the various final states with the initial state and the set of decisions made.

Given any element x of a class X of initial states, let v be a function such that v(x,d) is the "value" to the decision maker of the effect of the decision d applied to the initial state x. Then the book is concerned with the process of choosing the set d in such a way that v(x,d) is an optimum. Now x may be a gross approximation to the true initial state, components of x may be known only as probability distributions, or worse yet, how to decompose x into signifi-

cant components may not be known. The effects of the various decisions may be poorly known, and the values of the final states reached as a result of the various decisions may depend upon the whims of the decision maker. The author admits that "a theory of decision can at best catch only a portion of the flavor and reality of the actual decision process." However, he promises to deal "with a concrete theory of decision which . . . will enable some individuals to make better decisions."

In my opinion the author has only succeeded in presenting a somewhat lengthy discussion of various aspects of the problem as it is stated above. Perhaps the book could be called a comparative literature study on decision making.

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