

ment in integrating medical schools with universities on the theory that segregated medical schools organized primarily to produce practitioners may not produce the best medical training" (p. 275).

The second volume turns from the general to the specific. Nine major baffling subjects are reviewed in detail and with a surprising virtuosity: background, present state, and anticipations. Investigators are in general curious about the status in fields other than their own, but often find reviews in other fields written by investigators for investigators somewhat incomprehensible. The discussions in this volume will be helpful and orienting to them and also to many others who are interested in health problems, in foundation work, and in the work of government agencies.

The nine problems are covered in sections of perhaps 50 pages each, which are in the main composed as annotated compilations of the literature rather than as highly original interpretations.

The first section, cancer, slights neither fundamental problems in growth, nor, at the other extreme, chemotherapy, and it places the emphasis of the latter properly at preponderantly a preclinical level of development. The next section, on infertility, hardly discusses the problem of fertility, surely a basic problem in the world today. The problem of how to adjust populations to resources by better means than war, plague, and even improved production and distribution presses for an answer. Arteriosclerosis, hypertension, and the rheumatic syndromes, the next three sections, skirt the problem of aging, another fundamental.

The two sections on tuberculosis and virus diseases exemplify the present state of infectious diseases: tuberculosis, the bacterial representative, still a problem but well on the way to solution; and the smaller virus diseases, which are as yet beyond chemotherapy. No one knows the fundamental difficulty in treating virus infections. It is probably not simply the intracellular position of the invader; more likely it lies in the fact that the virus particle possesses life only when it can borrow the enzyme systems of the host cell, and thus is inseparable from the cell. Perhaps one must sacrifice the cell if one is to kill the virus during its intracellular period.

The last two sections, alcoholism and schizophrenia, are intensely interesting. Next to the problem of fertility and population, mental troubles head the list of human disabilities. We are all conscious of the present hints of biochemical as well as the more traditional psychopathological mechanisms in the mind, and these are well touched upon:

"The present intensified interest in the effects of drugs in schizophrenia or other forms of mental illness is due, in part, to immediate therapeutic hope, and, in

greater part, to the promise which some of these drugs seem to offer of shedding light on the biochemical mechanisms involved in mental disorder" (p. 650).

After a reviewer states what is in a book, he should say how good it is, what its uses may be, and what are its faults. The subjects are excellently presented, truly a major accomplishment. The book's usefulness is obvious, both as a source of thoughtful pleasure and of fact. The faults I do not find serious enough to mention.

WINDSOR CUTTING

*School of Medicine, Stanford University*

### Shock and Circulatory Homeostasis.

Transactions of the fourth conference 6-8 Dec. 1954, Princeton, N.J. Harold D. Green, Ed. Josiah Macy, Jr., Foundation, New York, 1955. 291 pp. Illus. \$5.

The chapters included in this report are "Action of epinephrine in man," by Henry Barcroft; "The circulation in the periphery," by Hugh Montgomery; "Mesenteric lymphatic dynamics in the rat," by Silvio Baez; "The circulation in the splanchnic area," by J. D. Myers; "The pulmonary circulation," by André Cournand; "The pulmonary circulation in hemorrhagic shock," by J. E. Merriam; and "The aortic and coronary blood flow," by Donald E. Gregg.

### Social Sciences

#### Research Frontiers in Politics and Government.

Brookings lectures, 1955. Stephen K. Bailey, Herbert A. Simon, Robert A. Dahl, Richard C. Snyder, Alfred de Grazia, Malcolm Moos, Paul T. David, and Donald B. Truman. Brookings Institution, Washington, 1955 vii + 240 pp. \$2.75.

This small volume surveys the new research techniques and theoretical developments important to the extension of knowledge of politics and government. The specialist will find this a convenient summary, and the layman will get an insight into the vast research area bearing directly and indirectly on politics, government, and political behavior. The professional will find some gaps, the layman some confusion, and both enough interest to warrant the reading of the 1955 Brookings series.

Like most frontiers, those surveyed in *Research Frontiers* are often not well-marked. As a result, the sound of border warfare comes from its pages. While all eight contributors are political scientists, much of the research into political behavior bears little resemblance to the traditions of the field. Indeed, I felt some concern lest my colleagues in po-

litical science find themselves occupationally displaced by the psychologists, social anthropologists, and sociologists. But the final contributor, David B. Truman, effectively restored the balance.

Stephen K. Bailey of Princeton opens the series by surveying familiar ground—the relationships between academicians and operators and the approaches to research in politics and government. In his contribution, "Recent advances in organization theory," Herbert A. Simon of the Carnegie Institute distinguishes between programed and nonprogramed decision-making. The object is to devise organizational structures to get the right decisions. Experiments along this line are surveyed, all of which might suggest to the layman both the danger of over-organization and the advantage of inefficiency that might make it tolerable.

Decision-making, the meaning, and the distribution of power are considered on a far grander scale by Robert A. Dahl of Yale in his "Hierarchy, democracy, and bargaining in politics and economics." These control systems, together with the price system, are viewed as complementary and not as exclusive power arrangements or social techniques. Reality is mixed; all techniques of control are used. This is true enough, but stressing this obvious point too much has its dangers. The pure models excluded complementarity, but stressing the mixture tends to obscure the vast differences in control systems.

New frontiers are surveyed by Richard C. Snyder of Northwestern University in his "Game theory and the analysis of political behavior." The practical politician and the professional bureaucrat "play the game" instinctively. Game theory promises to sharpen instinct and even to correct it. Now even the scholar might play the great game of politics vicariously. Snyder is modest in his claims. Game theory has yet to prove its utility. He suggests some interesting applications in international politics where the theory might throw some light on situations that are shrouded by security regulations. Moreover, in conflict situations with varying strategies available to both sides, with a range of possible outcomes depending on the pairing of strategies, and a range of pay-off values, policy makers might become more explicit and less vulnerable to surprise by the application of game theory.

Alfred de Grazia of Stanford, in "Research on voters and elections," surveys the techniques of probing voter behavior. This interesting contribution closes with the disquieting observation that "Traditional democracy is being slowly crushed in the gigantic pincers of depoliticization and totalitarianism." But this feeling is partly offset by Malcolm Moos of Johns Hopkins who, in "New light on the nominating process," gives a reasoned