Book Reviews

Systematizers

There exists in current society a segment devoted to the rationalization of the design and management of large systems. One might call it the "systems world" were it not that the sources of this segment are too diverse to answer to any single name. It includes much of what goes on in the fields of management science and operations research; much of what goes on in the development of weapons systems and space systems; much of what goes on in the manufacture, programming, and use of large-scale digital computers; with additional contributions from econometrics, modern control theory, and the like. It is this diverse group that forms the leading wedge of the transformation of our society into increasingly complex technological forms. It is the natural antagonist of our concern over automation, dehumanization, and the specter of 1984 or a Brave New World.

Robert Boguslaw is a sociologist who has resided in the midst of this segment for more than a decade. In this small book, **The New Utopians: A Study of System Design and Social Change** (Prentice-Hall, Englewood Cliffs, N.J., 1965. 223 pp., $6.35), he puts forward some observations based on that residence. His major thesis is that this segment constitutes the modern utopians —those who deliberately redesign society in a new idiom to solve the difficulties of the present. He does not judge these engineers and scientists to be witting utopians (although wittingly deliberate); it is only that, by virtue of their command over a rapidly expanding technology of information processing and control plus their iconoclasm with respect to existing features of social and industrial systems, they are the *de facto* successors to Plato (of *The Republic*), Thomas More, Herbert Spencer, and even such moderns as Orwell, Huxley, and Skinner.

Boguslaw has (at least three) minor theses. First and most important, the biggest difference between these modern utopians and their predecessors is that the earlier ones were fundamentally concerned with people; the modern ones are not. Instead, they are concerned with efficiency, reliability, and predictability—all of which lead to a somewhat jaundiced view of the human being. Since Boguslaw himself is deeply committed to the individual, he finds this characteristic distressing. The second minor theme is that moderns should be aware of their extended history, if only to avoid the errors of the past. Indeed, the main technique of the book is to range over the approaches to systems design, describing each in modern terms, and then bringing forth various utopians of the past who approached their problems of utopian design in the same way. Thus, the center four chapters (out of eight) are titled: "Formalist designs," "Heuristic designs," "Operating unit designs," and "Ad hoc designs." The third minor theme is directed towards his professional colleagues, the sociologists. The systems engineers and computer technologists have the initiative, he asserts; the sociologists and political economists now operate in a reactive mode. They study the effects of automation and the impact of technological change, but they do not propose the new social designs.

The strengths of the book stem from Boguslaw's wide knowledge of modern sociology, of the utopian tradition, and of the "systems world." Unlike many commentators, he has a firm grasp of the technological efforts. His description of it sometimes glints of caricature, but it is mostly legitimate oversimplification. The weaknesses stem from a certain confusion of audiences and a susceptibility to the occupational hazard of social commentators to have a say, along the way, about all the things they care about. On the first weakness, he wants to convince his fellow sociologists that they should grab the initiative, to educate his fellow technologists to a wider social context, and to provide the intelligent layman a glimpse into what is happening to his society. The demands for each are disparate and the text often wobbles between them. On the second, we are treated to additional themes—for example, where the power resides in social systems—that are both interesting and relevant, but end up defocussing the main theme.

The book is social commentary, by and large good commentary, of which there must be a great deal as we come to terms with our transforming society.

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Handbook of Physiology

Although the editors, Albert E. Renold and George F. Cahill, Jr., modestly disclaim for this volume, **Handbook of Physiology**, Section 5, **Adipose Tissue** (American Physiological Society, Washington, D.C., 1965. 832 pp., $28), completeness of coverage, the 69 papers, which cover 800 two-column, 8½ × 11 inch pages in 10-point type, with a bibliography of 4109 references, omit very little. The 69 papers, written by 79 authors, are roughly divided into three areas: (i) physiology and structure, 20 papers; (ii) metabolism of isolated adipose tissue, 28 papers; and (iii) regulation of metabolism in vivo, 21 papers. The last paper in each area is a summary.

It is pointed out by the editors that, in order to obtain various points of view of this active subject by their proponents, it was decided to present many relatively short papers rather than few long ones. The controversal aspects are thus emphasized.

Although one wonders whether another monograph on lipid metabolism is needed (this is the third on adipose tissue) the complete coverage of a field undergoing explosive growth does make this volume a valuable reference source and time saver. Its critically written chapters are also stimulating.

H. E. Wertheimer's "Introduction—A perspective" is most worthwhile reading. It is scholarly and imaginative, and demonstrates the depth and firm grasp of this pioneer's research on adipose tissue. Other very strong chapters are "Metabolic pathways in the insect fat bodies" by Alisa Tietz; "Glyceride bio-