really envisaged socialism as a capitalism without capitalists. Marx's ideal worker is pictured to be as ruthlessly rational in his planned struggle as the capitalist himself. Thus, far from desiring the simple destruction of capitalism (like many of the socialist-utopians under attack by Marx and Engels), Marxism really aims at salvaging its essential disciplines into the future. It is at such points that the author's interpretations will appear to some readers as questionable. What is truly consistent throughout the Marxian system, according to Ulam, is the revolutionary repudiation of the status quo and the confident acceptance of the immutable laws of material development which will work themselves out to the full.

Other aspects of the Marxian ideology are illuminated in a chapter devoted to the "sources of Marxism," a term which apparently is to encompass both relevant intellectual influences and the underlying social phenomena they are shown to reflect. The characteristic preoccupation with the fundamental clash of city and country ways in a transitional period is seen to have affected Marx as it did many of his contemporaries. This is, of course, at the root of the Marxian concept of alienation which, as others have brought out, Marx has in common with many contemporary conservative thinkers. Such considerations underlie Ulam's proposition that, while the faith in science and technology shared with liberals of all shades is crucial to Marxian logic, anti-industrialism with some associated traits of anarchism is basic to the Marxian emotional pattern. An examination of the work and aspirations of Cobbett, Proudhon, and the Chartist movement in their relevance to Marxian attitudes leads Ulam to the conclusion that "Marxism is the type of socialism that believes in industrialization but can live as a revolutionary movement of importance only in symbiosis with a widespread anti-industrial feeling."

Since in the author's view, with which many will agree, Marx and Engels fundamentally persisted in their understanding of the socioeconomic conditions of capitalism as they had formulated it by about 1850, Marxian doctrine failed to take into account the manifest and major changes of that system during the next decades. Hence, Marxism became set in a pattern closely linked to an early transitional system and could not effectively appeal to the evolving British labor movement of later decades, just as its growing "irrelevance" accounts for the efforts of German Revisionism and the decline of German Marxian orthodoxy precisely as German labor built up an organized mass movement in a maturing industrial system.

On the other hand, it is this very characteristic of the Marxian heritage which leads to its impact in Russia since the 1880's, its adoption as the "philosophy of total liberation," and the Leninist adaptation to that environment. As Stalinism succeeds in making over Soviet society in the process of accelerated industrialization, neo-orthodox Marxism-Leninism loses its hold and meaning in the Soviet community as it becomes essentially irrelevant to this stage of development. From the need to create new appeals and revive the ideological motivation of Soviet man, the masters of the Soviet system turn outward: even though Marxism-Leninism has become growingly artificial at home, it can serve, with the support of Lenin's theory of imperialism, "as the natural ideology of underdeveloped societies in today's world," while the offerings of Western liberalism are at a disadvantage by comparison.

The power of Communism in this situation is seen to lie in the inherited insight it carries into the psychology of masses and leaders in societies affected by the traumatic experiences of drastic change (both in terms of aspirations and aversions) and the meaning it attaches to change; while it ascribes the evils to capitalism-imperialism and its agencies, it instills a sense of purpose and a goal. Among the lessons which Ulam believes his analysis implies for the West, there is the view that ideological competition is less important than providing the social and economic foundations upon which democratic ideas and institutions may become meaningful. It is his belief that such institutional supports as trade unionism and sound administration count for more than adherence to formal constitutional procedures.

Ulam's *Unfinished Revolution* is a remarkable appraisal of the operative forces underlying Marxian socialism and communism in the light of hindsight and of modern experience. Its impressive single-mindedness, which will deter some, commands respect. It also gives unity to a vast and complex body of materials. No doubt such unity has its risks since it results in some labored or problematic interpretations of Marxian theory (such as his view of Marx's real opinion concerning the relation between social revolution and the fate of capitalism or his cavalier dismissal of Marx's views on the Paris Commune as of slight significance). This is not only a stimulating re-evaluation of an important body of doctrine and intellectual history; it might also serve as a healthy reminder to decision-makers that ideas and ideologies, "theirs" and ours, are in some crucial ways linked with their socioeconomic and, more broadly, their particular cultural foundations.

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Fast Neutron Physics. Part 1. *Techniques*. J. B. Marion and J. L. Fowler, Eds. Interscience, New York, 1960. xiv + 983 pp. Illus. $29.

This book is a gold mine of information on how to do work in experimental, fast-neutron physics (here taken to be from 1 kev to several hundred Mev but primarily below 40 Mev). The book contains many tables and graphs. The material is concerned chiefly with fast-neutron physics with positive ion accelerators, from which most of our information on fast-neutron interactions has come. However, some areas are not covered—for example, reactor experiments on fast-neutron radiation effects and neutron experimentation with electron linear accelerators, although they fall within the neutron energy range considered.

The volume includes discussions of neutron sources, recoil-detection methods, and detection by neutron-induced reactions, and a section on special techniques and problems covering a variety of subjects, such as time-of-flight techniques and fast-neutron radiation hazards; the portion on hazards includes a discussion of neutron radiation biology for physicists.

The editors have assembled an outstanding group of workers in neutron physics as contributors to the volume; and they have chosen, probably correctly, to allow each contributor to write an independent section and, therefore, to tolerate some duplication. Some of the articles are extremely good and contain much new information not available elsewhere. I was particularly impressed by the usefulness of the arti-

cles by A. Langsdorf (on neutron collimation and shielding) and J. H. Coon (on target preparation).

It is unfortunate that the reproduction of some of the figures is poor.

There is no question that this will be an invaluable reference work for physicists working with fast neutrons and for many other scientists. We look forward to the second volume, in which the results of these techniques, applied to neutron experiments, will be confronted with theory.

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Encyclopaedia of Microscopic Stains. Edward Gurr. Williams and Wilkins, Baltimore, Md., 1960. xii + 498 pp. Illus. $18.50.

This encyclopedia is a well-arranged guide to stains. Section 1 presents, in alphabetical order, the numerous stains and has highly welcome, additional information on their structure and solubility in different solvents. Section 2 deals with stains and indicators (arranged in order of ascending molecular weight); section 3 with diazonium and tetrazomium salts; and section 4 with tetrazolium salts and formazans. Considering their steadily increasing importance and the applications of tetrazolium salts, the reader would welcome additional information similar to that given in the sections on the more common stains. The book by Baker, *Principles of Biological Microtechnique,* is highly recommended by Gurr, and it may be helpful in this respect. Section 5 gives many well-selected references.

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The Changing Middle East. Emil Lengyel. Day, New York, 1960. 376 pp. $5.75.

The author, professor of history at New York University, undertakes to describe and assess the social and, especially, the political changes that occurred between 1950 and 1960 in Egypt and Syria, Iraq, Lebanon, Jordan, Sudan, Libya, the Arabian Peninsula, Turkey, Iran, and Israel, and to relate these changes to the foreign policy of the United States, which has in recent years been faced with so many critical situations.

Most of the book is devoted to the Arab states, their internal problems, and their relations with other states within the area. A chapter on Egypt and Arab unity constitutes one-third of the volume, and the theme of Nasser's ambition for unity and the resistance to it permeates all the chapters on the Arabs. Much emphasis is given to the activities of the United States in connection with the oil industry.

Israel receives the second largest amount of space; its treatment includes not only the second longest chapter in the book but also much material, in the Arab sections, on the policies of the Arabs toward Israel. Iran and Turkey are peripheral to the group of states forming the core of the Middle East—that is, the Arab states and Israel. There is one appendix containing a table on areas, populations, and forms of government.

The tone of the book is definitely political and, in many aspects, seems to lack objectivity. One fault is due to careless writing. There are numerous mistakes. For example, Count Bernadotte is referred to as "the United *States* Mediator for Palestine"; and it is stated that, when the British and French took action in 1956, they demanded that Egypt and Israel "cease fighting and withdraw their forces to positions ten miles *east* of the Suez Canal" (italics added) instead of ten miles on each side.

The author's prejudices appear frequently in his use of frivolous words, particularly regarding the Arab countries. In his relations to Iraq's Qassem, Nasser "The strong man . . . could huff and puff." In the 1958 crisis in Lebanon, the U.S. Marines found no obstacle to landing on the beaches except "the attractive and pleased young women in bikini suits."

There is a definite slant favoring Israel. The Arabs boycott Israel because Israel "provides the most telling illustration of an intrusion, a dynamic way of life." Israel's "supremacy was manifest in all phases of social activities." Nowhere in the book is there any serious criticism of Israel. No mention is made of the Stern Gang, the massacres of Arab villagers which created the refugee problem, the assassination of Count Bernadotte, or the ignoring of United Nations' resolutions looking toward a settlement. Israel appears to be the innocent victim of Arab hatred, where the various rulers need a whipping boy on whom to blame their own mistakes. The conclusion is that "time is on their side, the Israeli believe, and even the more pessimistic among them like to feel that an eventual combination of dawning realism and boredom among the Arabs will produce the beginning of peace."

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Salt Marshes and Salt Deserts of the World. V. J. Chapman, Leonard Hill, London; Interscience, New York, 1960. xvi + 392 pp. Illus. $14.50.

This volume represents a major synthesis of information about salt marshes. Almost throughout, the approach is that of the plant community and of the interrelationships of communities. It is interesting, almost refreshing, to read such a strong presentation of the community viewpoint and of postulated successional relationships. Environmental factors which loom large in importance in relation to these communities are the nature of the substratum; the elevation, including changes in elevation, of the land relative to the sea; and ever-present man with his grazing animals. Fewer data are available, and less material is presented, for a synthesis on the physiology and autecology of halophytes found throughout the expanse of salt marshes and salt deserts of the world. The manner in which man has, with greater or lesser wisdom, utilized these areas is noted. These instances seem to me to furnish prime examples of the importance of wild areas. Intensive reclamation of wild marshes may kill the goose that lays the golden egg, for these very wild species have, by their growth as primary colonists, brought about the building up of the land areas which progressively may be converted to grazing, haying, or crops. For salt deserts the great importance of wise use of applied waters and of suitable crops is illustrated. The mistakes of the past, and our present lack of knowledge, can be seen from the record here presented. Their import is perhaps most striking in southwestern Asia and in Africa.

Marsh and desert suggest highly varied water regimes, which turn out not to be so distinctive (though this