BOOK REVIEWS

Science in Modern Society. *J. G. Crowther.* Bibliog. Schocken Books, New York. 1968. xvii×403 p. $8.00.

In the nineteen-twenties and -thirties there flourished a group of science historians who argued that science arose and was fostered by certain factors and conditions external to it, such as the economic state of the fostering nation, or its social state, or its general cultural ambience. A. C. Crombie has pointed out that the ultimate strength of the notion is derived from "two majestic Victorian conceptions: Marx's observations that the character of a society is largely determined by its economy, together with compatible though distinct discovery of the anthropologists that 'culture' is a unity." J. G. Crowther's *Science in Modern Society*, a sequel to his 1941 *Social Relations of Science*, embodies a survival of that point of view of the twenties.

Crowther compares the growth of science after World War II in England with that in this country. He finds that British scientific growth was seriously hindered in the first two decades after the war, not because scientific creativity had disappeared, but because of the national attitude toward science, because of social prejudice, and because of complacency. All these factors arose, he claims, from the exhaustion of capitalist imperialism in England. American science, on the other hand, he sees as operating under no such handicaps, since he thinks this country is in an expanding phase of its capitalist development, much like that in Britain in the nineteenth century. Crowther finds next that scientific organizations are becoming increasingly conservative. He castigates historians of science because they have retreated from the study of external determinants, concentrating instead primarily on internal scientific development. Similarly he complains that British scientists are withdrawing from all-embracing organizations like the BAAS (the Division of Social and International Relations has been dispersed) and are finding refuge in organizations that serve limited scientific specialities. Crowther sees such a tendency as retrograde, inasmuch as ideological and political actions are far less likely to come from very specialized and small organizations. Finally, Crowther manifests his concern for the "decline" of British science by a call for "fresh social inspiration." He sees this inspiration coming only if there is a "fully effective reorganization" of the scientific social structure, which, in turn, depends upon "prior major social changes."

American readers will no doubt find *Science in Modern Society* an interesting and curious book. The appraisal of the American scientific scene by an outsider, especially an outsider with Crowther's bias, produces a picture quite different from that we normally encounter. Obviously, however, Crowther's insistence on the decisive nature of certain external factors, to the exclusion of all others, is both jarring and marring. Crowther's strict causality of economic and social conditions in the development of science appears plausible only when much else is ignored; it is a causality of Crowther's devising.

J. Z. FULLMER

Lunar Atlas. *Dinsmore Alter*, Editor. Dover Pubs., Inc. New York. (paperback reprint 1701) 1968. x+343 p. $5.00.

This is the photographic atlas of the moon, based on plates taken chiefly at the Mount Wilson and Lick Observatories, that was prepared by the Space Sciences Laboratory of North American Aviation, Inc., and published by that company in a magnificent limited edition in 1964. In the present edition, the size of the photographs has been reduced by about one-third, but the page size of 10½ x 12¾ inches is still generous enough to allow the plates to appear quite handsome. Since the paper is also necessarily thinner than in the original edition, though of excellent quality, there is some slight loss of detail in the reproductions, but they remain admirable.

The inevitable question regarding any collection of ground-based photographs published today is whether they are worthwhile in view of the much greater detail in pictures taken from lunar orbiters or landing craft. This Atlas should remain worth owning because it will probably be quite a long time before such complete coverage of the surface features under different angles of illumination becomes available from extraterrestrial observations. In addition, Plates 24–35 have the major features labelled and will help greatly in identifying them on later detailed photographs.

Much of the excellence of this Atlas is due to the care devoted by the Editor, the late Dinsmore Alter, to the choice and preparation of the illustrations. He has added several pictures which have historical value, because they show possible changes on the lunar surface. These include Alter's own series of photographs of possible obscuration of the floor of the crater Alphonsus, and Kozyrev's famous spectrograms of emission from the central part of that same crater.

At the end of the Atlas there are several valuable tables of numerical data on the photographs and the lunar features. All in all, there are few other books available to anyone interested in the moon that offer so much of value at such a reasonable cost.

P. C. KEENAN