at about 400 km and increasing by about 50 percent at the highest point, 700 km. As is now well known, the increase is produced not by cosmic rays but by particles of lower energy trapped in the earth's magnetic field. However, the Russians were limited to data obtained by telemetering over the Asian continent and did not receive results from the apogee of the satellite. In contrast, data sent back by our Explorer I satellite were obtained at an altitude high enough to make the increase quite clear-cut, and thus the presence of something different from the normal cosmic radiation was definitely indicated. In volume 2, based on results obtained with Sputnik III, both Krassovsky and Vernov show that they are aware of trapped radiation.

Other papers deal with the determination of upper atmosphere densities, satellite orbits, radio and optical observations of satellites, and the interaction of satellites with the ionosphere. Of particular interest are the ionospheric studies, reported by Krassovsky, indicating the very high electron densities in the upper region of the ionosphere which had not been previously accessible to direct measurements. The Soviet measurements on the electric charge of satellites are still unique and have not been repeated elsewhere.

After this successful beginning, one may look forward with anticipation to the translation of further volumes as they appear.

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Lewis Henry Morgan, American Scholar. Carl Resek. University of Chicago Press, Chicago, Ill., 1960. xi + 184 pp. Illus. $4.50.

This is a timely biography. Evolutionism in anthropology is being rehabilitated, and with this major reversal in perspective, it becomes necessary to rewrite the intellectual history of the discipline. In earlier decades of this century Morgan, along with the other 19th-century evolutionist pioneers, was first stoned outright by Western scholars and then buried under an avalanche of indifference. But now his books are being reissued, his journals are being edited, and publishers apparently find that he "sells." Resek makes the point that the waxing and waning of Morgan's influence may well reflect turns in American thought and life. Compared with Bernhard Stern's 1931 biography (*Lewis Henry Morgan, Social Evolutionist*), Resek's more sympathetic treatment is good documentation for this point.

Morgan, in the words of a contemporary, charted "a new continent of scholarship." In *The League of the Iroquois* (1851) he produced anthropology's first work in scientific ethnography. He entered comparative ethnology through a systematic study of kinship in the belief that he could demonstrate thereby the Asiatic origin of the American Indian. He emerged from this study, in his famous *Ancient Society* (1877), with a grand theory of the evolution of culture based on the evolution of technology, a theory that linked the development of the state to the development of private property. As a man and a scholar—as Resek says and then richly describes in fine style—Morgan cannot be easily categorized. Besides being an anthropologist, he was a lawyer, a politician, an entrepreneur, president of the American Association for the Advancement of Science, defender of the Indian, a true believer in the American Republic, and the author of a definitive treatise on the American beaver. It was left to history to display, in a huge paradox, Morgan's kaleidoscopic variety: after Marx and Engels discovered his writing, this upstate New York, Republican bourgeois was posthumously elevated to the status of a socialist prophet.

Yet Resek does not in any way convey the view that Morgan was an inconsistent, erratic thinker. One of the values of this book is that it is an antidote to Stern's volume. In Stern's hands, Morgan, caught in a crossfire of Marxism and Boasian antievolutionism, suffers the worst of both worlds and emerges as a virtual class enemy, as well as a "not erudite," unoriginal thinker with a few good ideas and more bad ones. Resek, an intellectual historian, does not consider Morgan's anthropological ideas as fully as Stern did, although Resek's discussion of classificatory kinship terminology, which Stern misunderstood, indicates that this might have been profitable. But Resek, in telling how Morgan's ideas developed, is much more convincing than Stern. And, in describing Morgan's development, he corrects Stern's assertions about Morgan's religious fundamentalism, the relation of Morgan's ideas to Darwinism, his attitude toward democracy, property, and American expansion, his originality as an intellect, and a number of other matters, large and small, ranging down to the adequacy of his library. Resek considers it the task of the intellectual historian to "uncover the assumptions that men live by in another time and place and that they modify or exchange for others as experience demands . . ." I think he has done this well for Morgan. He seems to give truth to a prophecy written by Francis Parkman in a letter to Morgan: "The more advanced we become in intellectual progress, the more your labors will be appreciated."

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Advances in Organic Chemistry. Methods and Results. vol. 1. Ralph A. Raphael, Edward C. Taylor, and Hans Wynberg, Eds. Interscience, New York, 1960. x + 387 pp. Illus. $12.

This volume contains six chapters: (i) "The Kolbe electrolytic synthesis," B. C. L. Weedon (34 pages); (ii) "Polyphosphoric acid as a reagent in organic chemistry," F. Uhlig and H. R. Snyder (47 pages); (iii) "The Wittig reaction," S. Trippett (20 pages); (iv) "Hydroxylation methods," F. D. Gunstone (45 pages); (v) "The selective degradation of proteins," E. O. P. Thompson (90 pages); and (vi) "Optical rotatory dispersion and the study of organic structures," W. Klyne (110 pages). An author index (26 pages) and a general subject index (13 pages) are provided. Each chapter is well written, by an authority on the subject, and each is an adequate, up-to-date account of the practical aspects of the topic, together with relevant theory, helpful experimental details, and results obtained. The book is well bound, beautifully printed and illustrated, and (considering the wealth of information it contains) woefully underpriced.

Despite these merits, some doubt might be entertained concerning any real need for this volume (and, by extension, the projected series), since four of the topics covered have been the subjects of excellent theoretical reviews within the past two years [Chapter 2, *Chemical Reviews* **58**, 321 (1958); 3, *Angewandte Chemie* **71**, 260 (1959); 5, *Progress in Organic Chemistry*, vol.