

**Social Ecology:**

a Critical Analysis. By Milla Aissa Alihan. Pp. xiii+267. (New York: Columbia University Press; London: Oxford University Press, 1938.) 14s. net.

**T**HE author discusses theoretically the use of the concepts of plant biology in considering human phenomena. The advances made by the human sciences in recent years may be attributed largely to the introduction of biological methods and ideas into these studies. Human ecology is an extension of this principle. It has been defined as "the study of the spatial and temporal relations of human beings as affected by the selective, distributive and accommodative forces of the environment".

The so-called ecological school in the United States is still, apparently, in the stage of clarifying its fundamental concepts and has, so far, little experimental work to show.

The present work is largely a commentary and exposition of the principles laid down by the pioneers of human ecology in the United States such as Park, Burgess, McKenzie and others. The author's discussion might well have been more critical.

Writers in Great Britain like Hogben frequently stress the need for a planned ecology of human life, while Pearl, Charles and others have discussed population problems in the light of animal and plant ecology.

There is no doubt, as the author shows, that a great deal of light can be thrown upon human life by the use of ecological concepts such as concentration, centralization, segregation, invasion, zonation and so on, which also enable us to study social phenomena of a new type. Psychologists may, however, query the validity of postulating fundamental principles such as competition as the motive force in the formation of a community or natural order. Perhaps the rather novel way in which competition is defined, namely, in the sense of mobility, freedom of movement or independence of locomotion, makes the idea more acceptable, though it might be equally appropriate to identify 'freedom of movement' with a co-operative community instead of with a competitive one as the ecologists do. J. I. COHEN.

**The Hills of Lakeland**

By W. Heaton Cooper. Pp. xviii+126+52 plates. (London and New York: Frederick Warne and Co., Ltd., 1938.) 15s. net.

**T**HOSE who know and love the Lake District will like this book: those who do not know the former can learn to love it through the latter. The text is obviously from the pen of one who has learned to love his native Lakeland. He describes the past and the present of a gem of English scenery in a style so facile and clear that the reader is transported as in a dream through crags and fells that alas have never been seen by many. He pays justifiable tribute to a region of great natural beauty and leaves the reader with a longing to down tools and indulge in the dream he has created. The dream, too, often amounts almost to reality through the beautiful illustrations which adorn the text. There are sixteen plates in

colour and thirty-six plates in monochrome which have been executed by the author. These pictures make the book.

To realize and appreciate the majesty of Lakeland it is essential to know its past history. Therefore, the author describes well its geology, with the aid of maps.

Well-produced and beautifully illustrated books of this kind can do as much as, if not more than, any other form of propaganda to encourage appreciation and preservation of our natural heritage—the countryside.

**Newer Methods of Volumetric Chemical Analysis**

By Erna Brennecke, N. Howell Furman, Hellmuth Stamm, Rudolf Lang and Kasimir Fajans. Wilhelm Böttger, Editor. Translated by Prof. Ralph E. Øesper. Pp. xiii+268. (London: Chapman and Hall, Ltd., 1938.) 18s. 6d. net.

**A**LL who make any considerable use of volumetric analysis will find this monograph of great value, for not only does it treat of the most recent advances but also, in addition, the editor has secured the co-operation of a number of recognized experts to deal with the various sections of this symposium. The topics discussed are: (1) The elimination of the titration error in acidimetry and alkalimetry; (2) ceric sulphate and (3) alkaline permanganate as volumetric oxidizing agents; (4) iodate and bromate methods; (5) chromous solutions as volumetric reducing agents; (6) oxidation-reduction indicators and (7) adsorption indicators.

In each section there is an excellent blend of theoretical and practical exposition, while to each chapter there is appended a selected bibliography which includes papers up to the end of 1936. The monograph has been excellently translated from the second German edition and is well printed and produced.

**The Lyre-Bird:**

Australia's Wonder-Songster. By R. T. Littlejohns. Pp. 12+30 plates. (Sydney and London: Angus and Robertson, Ltd., 1938.) 4s. 6d.

**T**O take motion photographs in heavy forest successfully is no easy matter, and Mr. Littlejohns and his collaborator, Mr. A. H. Chisholm, would have had to give up the attempt if they had not received assistance from the Federal Government. The final result was an excellent sound film which the Government now uses for propaganda purposes.

Mr. Littlejohns has written an interesting account of the lyre-bird and has supplied to the different 'cuts' from the film appropriate letterpress. From these serial pictures we see that the tail, when in full display, is spread forward over the back in the shape of a fan, with the two lateral feathers at right angles.

The lyre-bird is also a fine songster, and in its mimicry is unsurpassed. It has been known to copy the notes and calls of no fewer than seventeen different species, and other sounds as well, such as the tearing of bark by black cockatoos.