sented an immense mass of data, dissected and examined in painstakingly minute detail. It seems impossible that such a book could make pleasant reading, and yet it does. It is not easy to read; nearly every sentence requires and inspires careful thought. But it is beautifully organized and well written in plain English. It is a book that no one working in any of the social sciences can afford to be without.

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Physics

Theory of Crystal Dislocations. A. H. Cottrell. Gordon and Breach, New York, 1964. x + 91 pp. Illus. Paper, $2.50; cloth, $4.50.

This brief monograph is intended to outline the basic theory of dislocations. It is excellent in that basic ideas concerned with dislocations are very clearly described. The book is not intended to be, nor is it, a textbook on the subject. It is a pity that Cottrell did not include a few beautiful photographs of dislocations in crystals and some indication of his estimate about the future of the field. Both would have added to the value of the book.

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Psychology

New Directions in the Study of Language. Eric H. Lenneberg, Ed. M.I.T. Press, Cambridge, Mass., 1964. x + 194 pp. Illus. $5.

This book provides an excellent introduction to certain points of view toward and to some of the methods for investigating language. It consists of four papers (by Leonard Carmichael, Edmund Leach, Eric Lenneberg, who substituted for A. R. Luria, and George A. Miller) and a discussion by Frieda Goldman-Eisler which were presented in a symposium, organized by Lenneberg, held during the Seventeenth International Congress of Psychology in Washington, D.C., in 1963, and two other papers (by Roger Brown and Ursula Bellugi and by Susan Ervin) which were presented at other sessions of the congress.

Carmichael links human speech with the vocal skills and vocal functions of lower animals, thus pointing to the continuity of evolution of language, and brings out the important point that the structures involved in human speech undergo a good deal of postnatal maturation. In stressing biological aspects of human language, Carmichael is joined by Lenneberg, who argues that there may be specific biological propensities in the human species which are responsible for the appearance of the unique features of human language. Lenneberg also offers some evidence that can be interpreted as supporting genetic transmission of capacities for language. He disputes, with evidence, the notions that the appearance of human language is due to man's general intelligence or the weight of his brain, preferring the idea that species-specific biological capacities are responsible, although their character is as yet unknown. By bringing out biological aspects of human speech, Carmichael and Lenneberg emphasize viewpoints and evidence not widely considered in discussion of human language.

Miller reiterates his interest in the psychological character and effects of syntactic and semantic rules, describing some relevant research, and expresses his concern that if these rules are to be conceived as habits the habits must be of a kind that permit the language user to deal with new linguistic events—that is, to reflect the pervasive productive character of language. He reports work directed to the understanding of the process involved in negation.

The papers by Brown and Bellugi, by Ervin, and by Goldman-Eisler are data-oriented. The first two report empirical attempts to gain further understanding of the conditions and processes involved in the acquisition of language by the child. They are interesting and thought provoking. Goldman-Eisler summarizes much of her own research, designed to use the phenomenon of hesitations in the course of speech as a means of isolating the units of which speech is formed.

Leach's paper is concerned with animal names and categories involved in taboo, verbal abuse, and the like. His point appears to be that the social distance of the familiar animals from the human self provides, among other things, a basis for the distribution of these animal names into those which are affected by taboo and used in verbal abuse and those which are not.

While this collection of papers does not serve as a general introduction to all the extant and widely employed ways of thinking about and studying language, it does provide a rich, thoughtful, and interesting variety. It can be recommended.

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Allendoerfer Advanced Series

Projective and Related Geometries. Harry Levy. Macmillan, New York, 1964. x + 405 pp. Illus. $11.

During the present century research in geometry has been characterized by an ever increasing use of nongeometric tools. As a result, geometry courses required more and more outside knowledge, and finally they either disappeared altogether from the undergraduate curriculum, or became disguised courses in some other field. An important example is the linear algebra course which is presented as projective geometry. Recently, this historical trend has given rise to a counterbalancing interest in developing a 1-year geometry course for undergraduate mathematics students, a course that would somehow convey the flavor of geometry as a study in itself. An important feature of this book is that it is in fact a geometry book, although it relies more heavily than I like on linear algebra. The first chapter sets the tone, for the concept of transformation is introduced on page 1 and is immediately followed by transformation group and invariance. The inevitable digression on linear algebra is then presented. In this digression Levy fails to make use of the fact that the notion of transformation group is already available, and relies instead on the cumbersome and antiquated theory of n-dimensional determinants. The chapter ends with two examples—(i) the group of motions of the Euclidean plane, defined by equations and not by the property of being isometric, and (ii) projections in Euclidean space, for which the equations are immediately developed.

Later chapters deal with projective