

Book Reviews

Alan R. Rosenberg, Editor

AGGRESSION. By John Paul Scott. 2nd Edition. University of Chicago Press. Pp. 210+. 1975. \$4.95 paperback.

The first edition of this book was published in 1958, and the present, second edition has been revised and enlarged. The author has included his prefaces both to the first and to the second editions of this book in this second edition, and describes his effort as "one of the first attempts to systematically relate the new biological knowledge of animal behavior to a general human problem: the control of destructive violence."

In his introduction, entitled "The Problem of Fighting," he states, "the word aggression is widely used and misused in a variety of contexts. It may describe either an act of war by a nation or the behavior of an overenthusiastic salesman. Used precisely, 'aggression' refers to fighting and means the act of initiating an attack. We shall use the word in this exact and limited meaning. It is a highly important definition, for the prevention of the first move toward fighting is a fundamental method for its control." Unfortunately, the term "aggression" is used much more broadly in the general literature, and is not precisely interpreted as an act which initiates a fight. It is unfortunate that the literature is so badly split with reference to its conceptualization of aggression, which, as the author points out, covers a complexly derived set of widely varying animal behaviors.

Having started with this precise definition of aggression as initiating a fighting attack, the author proceeds to review a number of biological and psychological factors with which students should be familiar. In so doing, he ranges at considerable distance from his initial definition, with considerable profit to the reader.

In Chapter I, entitled "Psychological Factors Affecting Fighting," he points out that fighting is rare in such lower invertebrates as clams and earthworms, which lack a fighting apparatus, but in arthropods, fighting is very common. "Lobsters fight so viciously that the lobsterman has to fasten their claws shut so that his wares will not tear each other to bits." Also he notes the "inclination of social insects to attack any outsider." He describes fighting in all classes of vertebrates: fishes, amphibia, reptiles, birds and mammals. Having addressed himself to these considerations, the author proceeds to discuss the adaptive significance of fighting and the stimulation of fighting with reference to a variety of species. For example, he points out, "mice never fight over females . . . [while] dogs which ordinarily live peacefully together will fight furiously in the presence of a sexually receptive female."

The author then addresses himself to the adaptive effects of aggression,

and such principles of learning as primary stimuli, association conditioning, reinforcement, inhibition and extinction, as well as generalization and discrimination with reference to learning to fight.

Chapter II considers aggression as maladaptive behavior, and describes animal experiments with vertebrates initially, and then concludes with a clinical analysis of aggression as it relates to frustration, over-compensation, identification, projection, family life and mental health.

Chapter III reviews the physiology of aggression with some description of cortical, hypothalamic and autonomic nervous system factors.

Chapter IV provides a review of "Heredity and Aggression," with some discussion of breed and strain differences in aggressiveness, as well as material on sexual differences.

Chapter V, dealing with "social causes of aggression," discusses psychological bases for group aggression and identification, the stimulation and control of group aggression, relationship systems, and cultural determinants of behavior, leading to some commentary on welfare.

Chapter VI is a brief one which touches upon ecological causes of aggression, including temperature, food supply, space, and other environmental factors.

Chapter VII deals with the "Social Control of Aggression" and discusses such factors as the dominance hierarchy in animal and human societies, territorial dominance, socialization in animals and human societies, cultural outlets for group aggression, and such phenomena as initiation rites.

Chapter VIII explores a multifactorial theory of psychological, physiologic, hereditary and social causes of aggression. These are pursued in subsequent chapters which explore sexual, individual and strain differences, breeding experiments, hormonal and neurological factors, with a brief subsequent discussion of modeling, catharsis, and the limitation of human research with reference to human destructiveness and learning.

Chapter X addresses itself to "Violence and the Disaggregated Society," and reviews experiments with domestic chickens, aquarium fish, dogs, baboons, Norway rats, monkeys, wolves, gerbils, and finally human societies.

All of this is accomplished in a small book of 210 pages plus bibliography and index. Professor Scott's book is of value to any student, researcher or clinician who would seek a convenient overview of multiple factors to be considered in the biologic, psychologic and socio-cultural assessment of violence. Although this book is the work of a scholar, it is of limited value to the clinician or therapist in his work with aggressive or violence-prone patients. Nevertheless, Professor Scott has provided a basic, brief overview for those who are interested in the subject of aggression, which he specifically defines as the act of initiating a fighting attack. Despite its lack of direct application to the daily tasks of coping with clinical problems related to aggression and violence, this book reminds the clinician of man's mammalian heritage with respect to fighting, and of the variety of genetic, anatomic, physiologic and developmental factors which predispose our genus and species alike to fighting.

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