

Book Reviews

MAN, ETHOLOGY AND AGGRESSION

Man and Aggression

Edited by M. F. Ashley Montagu. Pp. xiv + 178. (Oxford University Press: London and New York, January 1969.) Cloth 42s 6d; paper 17s.

For thousands of years there have been two views of human aggression. Some have thought it an inherent unconditional urge, a kind of original sin. Others have seen it as a reaction to stress. In twelfth-century China, Hung Mai ascribed violence to "famines brought about by floods and droughts". "The first Remedy or Prevention," according to Francis Bacon, "is to remove . . . Want and Poverty in the Estate." Judging from a survey in 1932, scientists at that time almost unanimously agreed with Hung Mai and Bacon. In the past two decades, a number of scientists have returned to the view of aggression as an original sin—for instance, many speakers in two recent symposia on aggression¹ and ritualization². This book is a collection of articles by distinguished biologists and anthropologists, designed, in the editor's words, "to put the record straight, to correct what threatens to become an epidemic error concerning the causes of man's aggression", namely, the "view that man is an innately aggressive creature".

This is an admirable aim, and it could have been largely achieved if the contributors had been asked to provide general factual essays on aggression. For there is now a great deal of evidence in favour of the Baconian view, from mammalian behaviour, human tribal societies and the history of human civilizations³. Unfortunately, many of the articles are devoted to detailed criticism of arguments in recent popular books; some of them are reprinted book reviews. Repeated sledge-hammer blows are used to crack some very nutty ideas, and some of the discussion is made up of counter-assertion, appeals to authority and academic bickering. In the course of this, the reader is given a strange view of the science of ethology as a theory that most of animal and human behaviour is "innate". Of the many scientists who might have been quoted on the other side, only Konrad Lorenz is singled out, on the strength of some speculations in a few chapters of his recent book on aggression⁴. Two essays on the Ute Indians, excellent and informative but of rather specialized interest, have been included apparently solely because Lorenz mentions these people. This concentration lends an unnecessarily personal tone to the discussion, and some of the contributors tend almost to dismiss Lorenz as an amiable bird-watcher, and certainly do less than justice to his contributions to science.

Because the book is aimed at a wide public, it may be worth while "to put the record straight" about both Lorenz and ethology. Darwin attempted to start a science of human and animal emotion and social response, but

could only begin by guessing at the emotion and then seeing what the individual did. The problem of reasoning objectively from behaviour to emotion was solved by Lorenz in the 1920s, when he focused attention on the units of movement and posture which make up behaviour other than language; he thus started the science of ethology. Tinbergen and his colleagues developed this idea into a body of high-powered techniques, and Chance and others applied them to mammals, especially monkeys and apes. In lower animals, the units of behaviour are sometimes innate, that is, they do not have to be transmitted socially by older individuals. In man, and even in monkeys, a great many units are acquired by imitation, or by adults selectively discouraging or encouraging bits of behaviour by the young. The methods of ethology can be applied to either situation⁵; Lorenz himself has endorsed this principle⁶. Applied to higher mammals, ethological methods have amply demonstrated that aggression is not an inherent unconditional urge, because those of any species will behave peacefully in favourable conditions, and will torture and kill each other without restraint when under stresses of population pressure³. We owe this demonstration ultimately to the method of Lorenz, not to speak of his many major contributions to the science since he founded it. To assess his work on the basis of a few chapters of one book is like assessing the work of Freud on the basis of a few speculative passages in, say, *Moses and Monotheism*.

Fortunately, some of the contributors do provide general essays replete with facts, and these go far towards achieving the editor's aim. Sally Carrighar draws on her extensive field observations of several dozen species to conclude that most of them "spend far more than half their time . . . in casual or amiable association with their fellows". After an accurate comparison of the densities of rats in the experiments of Steiniger and Calhoun, she draws attention to the relation between "war and the population explosion" in modern man. Much evidence supports this suggestion³. Geoffrey Gorer makes a pertinent comparison of extremes in human tribal societies: on the one hand, the cannibals of the New Guinea Highlands, who regularly kill, eat and (if female) rape any individual they come across except a few specified kinsfolk; on the other hand, the Arapesh, Lepchas and Ituri pygmies, among whom violence is almost unknown. He thus not only shows the great range of human behaviour, but picks out another important factor. Among the cannibals, men and women are conditioned to behave quite differently; among the peaceful peoples, "no child grows up with the injunctions, 'all real men do . . .' or 'no proper woman does . . .'". Gorer sees an approach to the second attitude in the present young generation of the industrial societies, and considers it a hopeful sign. Finally, in the longest article of the book, John Crook contributes a relevant, stimulating and richly informative survey of the diversity of spatial relations in birds and mammals, their territories, ranges, schools and communal breeding grounds, in relation to aggression. These contributions alone make the book worthwhile. It is to be hoped they will help to remind a wide public that in this great controversy assertions and speculations, on either side, are no substitute for facts; and that the facts from many fields do strongly suggest that human aggression is a reaction to present stress (especially population pressure) and/or to past stress transmitted by distorted upbringing.

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¹ Carthy, J. D., and Ebling, F. J. (ed.), *The Natural History of Aggression* (Academic Press, London, 1964).

² Various authors, *Phil. Trans. Roy. Soc. B*, 251, 247 (1966).

³ Russell, C., and Russell, W. M. S., *Violence, Monkeys and Man* (Macmillan, London, 1968).

⁴ Lorenz, K., *On Aggression* (Methuen, London, 1966).

⁵ Russell, C., and Russell, W. M. S., *Human Behaviour: a New Approach* (Deutsch, London and Boston, 1961).

⁶ Lorenz, K., *Evolution and Modification of Behaviour* (Methuen, London, 1966).