

the result that of its 200 pages only about 40% consists of letterpress. Both the presentation and the *National Geographic* style of writing throughout bear clear evidence of the influence of Tinbergen's anonymous collaborators. The result is a book which is outstandingly clear and simple—which in these days of scientific jargon is praise indeed—but much has been sacrificed for this form of presentation. There is perhaps an over-emphasis on the spectacular, and the letterpress is at times compressed to the point where full intelligibility is almost impossible; indeed in places real misunderstandings can arise.

As an example: pages 140-141 are devoted to nine photographs of a circus-type performance of the white rat, entitled "Tests for Thinking Rats." The descriptive matter is little more than 100 words, and the general implication is that the learning achievement displayed in the photographs is of such a high grade as to bring these creatures as "thinkers" into the class of man and the apes. The juxtaposition of the pictures, and the lack of full descriptive matter, gives an entirely false impression of the results of a piece of work carried out nearly 40 years ago, reference to which will be found in none of the standard text books on the subject, and which is not given in this book. This is an example where the 'hotted up' presentation could lead the inexperienced badly astray. One feels that in such cases the first author must have been hustled by his associates. But considered as propaganda aimed at the young, and the layman and the novice for what the authors somewhat misleadingly single out for description as an "infant Science," it is superb.

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### **On Aggression, by Konrad Lorenz.** Methuen, 30s.

One day this book will qualify Lorenz for the Nobel Peace Prize. It is much more than another book on animal behaviour, important though it is as such. For man is still an animal in much of his behaviour, which is instinctive to a degree to which we have not yet begun to face up. At least political man has not; advertising man knows it well enough and cashes in.

Lorenz's main thesis is that man's aggressive instincts were worked into his nature in the long millennia when they were vitally necessary to his survival. In fact, had they not evolved, we should not be here today. But unless we can find some means of neutralising them, we may not be here tomorrow. For unchecked aggressive instincts just will not do in a world where the means of aggression have become literally capable of exterminating mankind. This last situation works against the whole course of evolution, which has been concerned to ritualise aggression so that the species is not endangered. To some extent man does already ritualise his aggression in competitive sport and other ways, but nationalism is still not adequately satisfied by winning the World Cup, and anyway only one nation at a time can do this.

Lorenz ends his book with an "avowal of optimism," in which he expresses his belief that before very long everybody, not just a handful of behaviour scientists, will accept the basic facts about human aggression and the need to pursue every possible way of diverting, ritualising or neutralising this ancient once good but now bad pattern of behaviour. The more widely this fine book is read, the sooner this happy day will arrive.

RICHARD FITTER