

Professor S.A. (Tony) Barnett was Head of the Zoology Department of the Australian National University in Canberra. He became a good friend during my many visits to Australia, and I was glad when he joined my Editorial Board. He reviewed a good number of biological books for the Journal, and his wide interdisciplinary knowledge of his subject was a great help to me. His special field of research was animal behaviour, and in a fundamental article which he called **Co-operation, Conflict, Crowding and Stress: An Essay on Method** he criticised the unscientific comparison between unrelated animal and human behaviour. Here follows an extract of the abstract he wrote for the Article, published in June 1979.

The science of animal behaviour is still evolving from its pre-scientific past. It rests on exact description, but is an experimental discipline. In Wittgenstein's phrase "conceptual confusion' remains." Analysing the concepts of altruism, crowding, dominance, stress and territory, Barnett tried to replace the illusion that ethology can solve human problems, with a statement of what ethology can do.

Social ethology, analysing the species-typical signals of animals, can provide methods for studying human non-verbal communications in infancy. But human languages are argumentative and superior by several orders of magnitude.

The concepts of territory and of dominance as well as subordination have been valuable in the study of animals, but they are of little use in the analysis of human societies.

Man is uniquely versatile and has no single habitat or mode. Hence the human species must fall outside any analysis in which habitat and species-typical conduct are related.

"Current fashionable comparisons of man with other species reflect the prejudices of the writers, and have no scientific validity"—Barnett wrote. "The notion that men are ineradicably violent among themselves is a version of a pessimistic outlook which has been repeatedly expressed throughout history. Biological findings have been used, unjustifiably, to support this view and its opposite. The concept of innate behaviour, and of genetically fixed patterns of conduct, is being replaced by an epigenetic interpretation, namely: Behaviour, like other features, is a product of an ontogeny in which genotype and environment interact.

"Human diversity creates immense problems for man, but also provides means of solving them by conscious, voluntary action" Barnett concluded.