



Books For Banders

"SOMETHING OLD AND SOMETHING NEW"

Edited By Mabel Gillespie



One prominent aspect of avian behavior is display. Edward A. Armstrong, an Englishman, has published a book called "Bird Display and Behaviour", dealing with this aspect. A revised and enlarged edition was published in 1947. Any time you are in the vicinity of a well-stocked library it would be worth your while to take a look at this book. At times you will encounter tremendously long sentences; at other times the text is touched with the spirit of poetry.

The author defines display thus: the inclusion of "movements, postures and sounds, generally of a conventionalized kind, which have the capacity to initiate specific responses in other creatures, more particularly in members of the same species".

The first chapter deals particularly with the Gannet. The author notes that all large sociable birds such as Mallards, Egyptian Geese and Whooper Swans make noticeable preparations when about to take wing. Such "flying-up ceremonies" belong to a large class of activities which are of the nature of initiatory or "intention" movements.

"The Gannet, like some favoured human beings, has emancipated itself from the worst rigours of the struggle for existence. Therefore it can work off surplus energy in harmless posturing... It makes love and war ceremoniously; there is a ritual of taking flight, of greeting, of nest-building and of feeding the chick. All this would not be so unless in some measure ceremonial brought satisfaction and a sense of well-being to the individual and prosperity to the race."

In the second chapter, entitled "The Psychological Basis of Nest-Building", appears the following pungent theory: "Lack of specialization is not always a disadvantage or an indication of stupidity... It may be that the ability is but dormant and that the raw mental material still awaits exploitation... Too precise specialization in a changing world may be a greater danger than too little, for the specialized organism may have to deal with the problem of unlinking the sequence of its behaviour, and it is never easy to blaze trails away from the beaten and accustomed track. The Great Auk and the Dodo might be alive today had they not specialized themselves to such a high degree, the one to an aquatic, the other to a completely terrestrial existence."

There follows a chapter on courtship feeding, a situation with which we are all familiar. This leads to "ceremonial gaping". Its main function

is to initiate, augment or maintain mutual feelings. Gaping is particularly noticeable in fledglings begging for food. The begging actions of the Cuckoo (European) have an almost compulsive effect in inducing other birds to feed it. Crippled and even blind birds get fed by gaping.

"Displacement reactions" include "freezing" with human analogies, ecstasy and trance during display. "Distraction display" includes injury-feigning among nearly a dozen types. "Displacement activities" and "Incongruous behavior" chapters mention 18 types of erratic reactions. "Herring Gulls have ritualized displacement-nesting into a threat action performed not only in the breeding colony, but at the feeding place." Kittiwakes preen after their chicks are stolen.

There are chapters on greeting, invitatory and nest-building ceremonies, mutual and reciprocal ceremonies, tension types of social ceremony, and the sympathetic induction of behaviour. From the last named chapter occurs this passage: "What have been called the 'herd instincts' of humanity indicate that we share many of our cruder social reactions with the animals, but our ability to cooperate is also undoubtedly inherited from our animal ancestry."

The chapter entitled "The Function of Social Ceremonies" contributes the following statements. "Large colonies of gulls not only begin laying earlier than small colonies but lay their eggs in a shorter period. Consequently the large colonies are more successful in raising chicks." This is due to social stimulation. Probably "the mere sight or sound of other neighboring birds displaying has a sexually stimulating effect".

"It is possible that once the stock of the Heath Hen had fallen below a certain number the extinction of the species may have been partly due to the stimulatory displays, which were so important a feature in this bird's life, being ineffective by reason of the paucity of birds."

In discussing the advantages of sociability, the author states: "Limitations are set upon sociability by such factors as territorialization and the dominance of one individual over another, but birds, like men and apes, are normally sociable beings... Social intercourse is not merely an amenity for men, apes and birds; it is a necessity, deprived of which the individual becomes abnormal."

"The Dances of Birds and Men" is the title of the fifteenth chapter. Before we continue with the author's development of the subject, this humble reviewer would like to affirm her delight in the fact that Armstrong, like Konrad Lorenz, defies the school of thought which denounces any hint of anthropomorphism in explaining bird behavior. While we want to avoid the too frequent sentimentality of babbling about the dear little birds, we would do well to follow the indications well documented by both authors that we have much in common with birds, to say nothing of apes, in our behavior patterns.

Armstrong declares: "The resemblances between avian and human dancing are the outcome of emotional drives which underlie the behaviour of all the higher animals, and the natural corollary is that we can use the terpsichorean activities of men to interpret those of birds, and vice versa. Let us not be scared by the bogey of anthropomorphism into the arms of the spectre of Cartesian mechanism. It is not anthropomorphism to believe that man and the higher animals have much in common so far as instinct and emotion are concerned, but an acknowledgment of truth scientifically demonstrated."

After a survey of various types of dancing and the assorted emotions that result in dancing, the author claims: "Without this realization of the intertwining of emotions we can never understand the behavior of birds, mammals or men."

"Whatever the type of the dance, long-term or short-term, erotic or bellicose, social or solo, performed by man, ape, or bird there is one generalization which we can make. In the dance the individual reaches out beyond his isolation and seeks to realize that harmony between himself and the external world without which neither health nor happiness can be achieved and on which the perpetuation of the race depends. It is not surprising that some of the Fathers of the Church said that the angels were always dancing, and that the Gnostics of the second century attributed to Christ the words 'Whosoever danceth not, knoweth not the way of life'".

Further chapters are entitled "Arena Displays", "Arena Displays and the Synchronization of Male and Female Rhythms", and "The Social Hierarchy in Bird Life". "Arena displays are a compromise between the impulse toward isolation which is the basis of territorialism and the impulse toward competition. The one drive is satisfied by defending territory, the other by the territory being close to, or at least in direct relationship with, others." The third of the chapters mentioned goes into the details of pecking order. For instance, there is peck-right, peck-dominance, and supersedence.

In the discussion under "Dominance and Territory" it is stated that "the essential feature of territory is defence against competitors of the same species". The territorial drive is concerned with sex rather than hunger. As concerns the dispersal and evolution of special the "dominance drive remains within limits consistent with social activities until the sex drive, with the associated impulse to establish an isolated territory, reinforces the dominance drive so that pugnacity gains complete ascendancy."

The discussion of "Song, Song-Flight and Display-Flight" states that a "display-pattern is often a complex of visual and auditory signals"; also that "from the functional point of view no precise distinction can be drawn between song and calls".

"The Significance of Display" notes a correlation between adornments and display, giving as an example the British Goldfinch which "strikes attitudes different from any other finch, but which show off his decorated wings..." There is detailed discussion of releasers and imprinting, and the chapter ends with pertinent but unanswered queries.

The final chapter has a tremendously long title. It deals with rhythms, the effect of light, sex hormones, general metabolism, and other details. The facts indicate that a "female tends to pair-up with the male who manifests the greatest sexual, nest-building and display activity... Forces are still at work which select the fittest, and it is still true to say that Nature eliminates the unfit. The fit, indeed, select themselves and one another".

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"On Aggression" by Konrad Lorenz, which was reviewed in the last issue of EBBA News, is now available in paperback (Bantam, \$1.25).

We haven't had any audience participation in this department for a considerable time. It would be a fine way to start 1968 with contributions from EBBA members.

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1968 ANNUAL MEETING - CALL FOR PAPERS

The program for the 1968 Annual Meeting is now in preparation, and all members interested in presenting papers are requested to contact the program chairman as soon as possible: Dr. Franklin McCamey, RR 1, Box 503, Milford, Ohio 45150.

Please give a brief summary of your presentation, the approximate time you will need, and any special requirements as to equipment or space, i.e. projectors, etc.