

Reviews

Ristau, C. A., ed. (1991): Cognitive ethology, the minds of other animals (Cognitive Verhaltensforschung. Vom Wesen anderer Tiere). Lawrence Erlbaum, Hillsdale. 332 S., figs., H/C \$ 64.95, £ 36.00, P/B \$ 29.50, £ 16.50.

Reviewed by Juan D. DELIUS, Lehrstuhl Allg. Psychologie, Univ. Konstanz.

The book is a Festschrift honouring Donald R. GRIFFIN on occasion of his retirement from the Rockefeller University, New York and is based on a celebration symposium held at Williams College, Williamstown, Mass. in 1987. Although Don GRIFFIN's interests have ranged quite widely during his long career – he became internationally known in the late 40ties with his ground-breaking research on the ultrasound echolocation of bats – the volume focuses on his more recent area of interest, the consciousness of animals, a topic he dealt with among other things, in his two books "The question of animal awareness" (1976) and "Animal thinking" (1984) and the Dahlem Workshop "Animal mind – Human mind" (Ethology 70, 262–264).

Unusually for a Festschrift the honoured scientist himself introduces the subject with a fine first chapter. It is a concise, useful summary of his opinions and arguments about animal consciousness that takes into account much of the criticism that was voiced since the above mentioned books appeared (Ethology 82, 176). Only about deciding the question of whether a person other than oneself is furnished with consciousness GRIFFIN is rather cavalier. He dismisses the problem too lightly considering that it is closely analogous to that asking whether one's dog has consciousness. A chapter by Colin BEER usefully assembles some of the relevant philosophical foundations. He adroitly focuses on the term "intentionality" which according to some current and influential philosophers is a technically more satisfactory concept than consciousness. It is indeed frequently cited in the remainder of the book. BEER adumbrates that its philosophical meaning is only distantly related to that of its common language root "intention" and quotes Franz BRENTANO's (1874) "Psychologie" as the source of that specialist meaning. On checking, BRENTANO however only speaks of an "intentional inexistence" as being the essence of mental phenomena and refers his readers back to medieval scholastic philosophers for definitions. They can hardly be expected to emerge as suppliers of an operationally useful conceptualization. Moreover, the editor of the "Psychologie" edition consulted by the referee volunteers in an epilogue that BRENTANO himself later in his career lost faith in the construct, whatever its meaning was. The reviewer at any rate remains skeptical about the advantages of exchanging the old-fashioned consciousness for the newfangled intentionality. The philosophical foundations are pursued further but not very helpfully, by Jonathan BENETT in a third, very theoretical chapter. — The second part of the volume contains a number of more empirical chapters. Gordon BURGHARDT in one of them for example examines what contribution the freak behaviour of a two-headed rat-snake and the death-feigning of hognose snakes might make towards the question of consciousness/intentionality in animals. Carolyn RISTAU, the editor, pursues an analogous aim in a nicely written chapter on the injury-feigning behaviour of nesting piping plovers. In fact, both authors show that the distraction displays of these species are by no means the instinctive, stereotype reactions hitherto assumed but that they are instead variable, experience influenced responses that are exquisitely adjusted to even slight variations of predator behaviour. That is a commendable correction of older views but it does not suffice as clinching evidence for either intentionality or consciousness as the authors readily admit. In a further chapter Dorothy CHENEY and Robert SEYFARTH compile (again) the presumed instances of deception in animal communication and marshal the still scarce experimental evidence for such lying. They are not particularly insistent on its intentional causation and prefer to await the results of further studies. In an other contribution Peter MARLER and students of his show with systematic and well controlled experiments that the alarm and food calls of cockerels are closely modulated by the presence or absence of an audience, that is a hen or else further cockerels. They cautiously consider that this may indeed reflect intentions of the callers, although they cannot exclude at this stage a simpler, reflexive interpretation. But even the very circumspect criteria that they adopt are skillfully criticized by John SMITH in the chapter that immediately follows. It turns out that a much simpler framework may be sufficient to explain MARLER et al.'s findings. In an informative and entertaining chapter Irene PEPPERBERG documents the linguistic feats of her grey parrot genius Alex, the worthy successor of Otto KOEHLER's famous Jako and others. Alex's abstracting and communicative feats are of course remarkable (see also Ethology 75, 37–61) but the evidence for consciousness/intentionality that can be distilled from his output hardly goes beyond the anecdotal.

To be fair to the birds, Allison JOLLY's review of the possible evidence for consciousness in chimpanzees and George MICHEL's comments on the contribution of human cognitive psychology add even less to the narrow issue at hand and rather pave the way for the next chapter. It is definitely unusual to find in a Festschrift a contribution that is explicitly critical of the scientific opinions of the person honoured. The fact that this one contains such a chapter by Sonja YOERG and Alan KAMIL shows that it is not a run-of-the-mill Festschrift. The critics come out strongly against cognitive ethology being a research program concerned only with the question of whether animals have consciousness, awareness, intentionality and similar entities because they say, whatever the results the issue cannot be unequivocally decided. They plead instead to extend the scope of cognitive ethology, so that it becomes a fusion of cognitive psychology and animal behaviour encompassing perception, memory, reasoning and like phenomena rather than only the elusive mental processes on which GRIFFIN focused. Interestingly, in their discourse they briefly consider whether consciousness might not be a design feature of the next generation of computers. That indeed would bring a welcome utilitarian clarity to the last reserves of mentalistic psychology!

The editress closes the book with a remarkably readable summary that brings the variety of pro and con arguments into a fair perspective. Thus though the reviewer is still uncertain about whether his cat, or for that matter his neighbour, is equipped with consciousness or not, he is much wiser about the complexities of animal behaviour thanks to an interesting, nicely assembled, well edited book.