though we may need such methods to analyze motivations of the Bengalese finch? As the Waterhouses say in their review, the future lies in comparison of measures, between cultures, age groups, or even species, so measures should perhaps be made with future observations, not just future statistical techniques, in mind.

Blurton-Jones and Konner do just such a study, comparing sex differences in London and !Kung Bushman children. Among other observations, they find that the Bushman girls are rougher-and-tumbler than London middle-class girls, which might support the contention that our culture inhibits females. More impressive, perhaps, are the similarities in sex roles which underline the importance of the innate component. Brindley, Clarke, Hutt, Robinson, and Wethli also emphasize innate components of nursery school sex differences—adding the nice point that most instances of girls' cooperation occur when older girls help younger children, whereas among boys it is the younger ones who seek to tag along in older boys' games.

Kendon and Ferber's paper on human greetings falls at an earlier level of analysis—the description and quantification of individual gestures. It again is strained by the self-discipline of "objectivity" in all-too-familiar situations. Here the authors save themselves by, first, an introduction stressing the comparative approach; second, seeing a surprising number of gestures of which we are usually only half-conscious (for example, the "body-cross" when a greeter places an arm across the midline during the last stages of approach, which may well be a substitute means of preserving individual distance); and finally, conveying the feeling that they themselves can't quite keep a straight face, especially as the hostess whose greeting behavior they were studying had the sense to wear magnificently flowered beach pajamas.

Finally, Simpson's paper on grooming in Gombe stream chimpanzees and Hess's description of sex among captive gorillas perfectly illustrate the quandary of whether quantitative observation illuminates or obscures social behavior. Simpson counts grooming bouts up, down, and sideways among his 11 male chimpanzees. He ends with a part-paper, a fragment which will take on meaning (or even comprehensibility) only when compared with other grooming studies, or when synthesized with other aspects of these same males' behavior, to recreate, in detail, the kind of character sketches of individuals which Simpson couldn't resist telling in his oral presentation of the same work. Hess, in contrast, in a qualitative, "preliminary" account, shows that the Basle Zoo gorillas have eager, individual, and complex patterns of sexual behavior, from the mother's first genital inspections of a newborn to the urgent invitations of the estral female. Hess succeeds in conveying, as clearly as any author in the book, that higher primates are inventive creatures and find many ways of enjoying themselves.

This book will be bought by the captive audience of libraries and by those individuals who are pursuing adjacent parts of the same puzzles, but by few of the wider public, particularly at $34 a copy.

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Sea Spiders

Pycnogonids. P. E. KING. St. Martin's, New York, 1974. 144 pp., illus. $8.95.

This compact volume brings together a surprising amount of information about these enigmatic marine arthropods. As might be expected from the author's interest in the histology and feeding habits of pycnogonids, physiological and structural information is most adequately reviewed. In addition to his own contributions, King has stimulated several students to undertake studies of the reproductive and nutritional biology of pycnogonids; he has set up a sort of school of pcynogonid studies at Swansea. This book has grown out of this activity, and is intended as an introduction to stand alongside the growing number of inexpensive paperbacks about various groups of invertebrates that have appeared in recent years. It is my understanding, however, that this book is to be available only in this expensive hard cover, senior professor edition.

The literature on pycnogonids is not easy to summarize because so much of it is systematic, dealing with descriptions of species, revisions of older descriptions, and geographical distributions. Ecology and behavior are still for the most part unknown, and often tidbits of information are tucked away in unlikely places. Obviously the author lacks command of this systematic literature, for he often uses obsolete and current generic names on the same page, and overlooks information in papers he has consulted in other contexts. The chapter on affinities and evolution is based on a less than careful reading of the available information. The chapters on morphology and anatomy are reasonable summaries, but unfortunately all illustrations have been redrawn in a muddy, heavy line and stipple style that obscures details when they are not distorted. Nowhere in the book is there a good drawing of an entire pycnogonid, and there are no photographs except for the very good one on the dust jacket. Thus it will be difficult for many who consult this volume to get a good idea of what one of these animals looks like.

While the book will have its use as an introduction for students, as intended, it could have been a much better book. Many of the mistakes are obviously due to haste at the expense of reflective reconsideration. The prose style appears to be taken directly from clusters of sentences on filing cards. I wish King had taken the time to reread and rewrite before committing the book to a publisher.

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The Thysanoptera

Thrips. Their Biology, Ecology and Economic Importance. TREVOR LEWIS. Academic Press, New York, 1973. xvi, 350 pp., illus., + plates. $22.

This book on a minor insect order covers the group completely, except for its systematics. It is a timely compilation, to be welcomed by the general entomologist, the teacher, and younger workers in the order. The references, appendices, and index, in which a high degree of accuracy is evident, will be of great help to the nonspecialist.

Anatomy, reproduction, feeding mechanism, and life cycles are covered in the manner of most major texts on entomology but in more detail. The chapters on migration and dispersal and factors affecting field populations are particularly well done. While many predatory species of thrips depress insect pest populations, there is little evidence that members of this order control major infestations. Likewise,