graphical examples. This is followed by a more detailed presentation of one or two specific techniques, the purpose being to give the reader a basic understanding, excite his interest in using the method, and direct him through literature references to fuller and more comprehensive treatments elsewhere.

The section on multivariate methods includes principal component analysis, generalized distance methods, and canonical analysis. The chapter on clustering is dominated by Neely's neighborhood limited classification method, although the reader is given ample basis for working with other, more conventional techniques. The chapter on stress analysis mentions (and references) a wide variety of experimental approaches, but detailed treatment is limited to work in polarized light with plastic models. The optical data analysis section is dominated by discussion of Fourier transformations using optical techniques, but many other filtering and non-Fourier transform methods of image processing and pattern recognition are briefly yet enticingly introduced.

A particularly refreshing aspect of the book is that Oxnard has purposely included several methods that are as yet not fully tested and some that are frankly trial balloons. This is especially true of the section on optical methods, but examples are found throughout the volume. The effect of this approach is to challenge the reader to extend and develop the subject matter of the book—in sharp contrast to the effect many books of this sort have of freezing progress in methodology by putting it between hard covers.

The book also contains rather lengthy discussions of the problem and pitfalls of obtaining and working with morphometric data and of the strategies of biological interpretation of structure and function. In these areas, Oxnard beautifully complements and extends the classic works of such masters as Huxley, Fisher, and D'Arcy Thompson.

In summary, this is an optimistic and forward-looking treatment of the field of morphologic analysis. Though directed at primatologists and physical anthropologists, it will be appreciated by all those concerned with modern methods of interpreting form and pattern.

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Beetles

Biology of Coccinellidae. IVO HODEK. With keys for identification by co-authors. Junk, The Hague, and Academia, Prague, 1973. 260 pp., illus. + plates. 100 Dutch guilders.

The common, orange-red, often spotted lady beetles, ladybugs, or ladybirds are known and liked by nearly everyone. These familiar insects represent only a few of the more than 4000 known species in 500 genera in the family Coccinellidae. The worldwide distribution of coccinellids from the temperature region to the tropics, the biological and ecological diversity of the species, and the importance of lady beetles in the control of agricultural, forest, and garden insects and spider mites have attracted investigators from wide areas of biology and ecology.

Hodek has succeeded in compacting the essence of over 500 cited papers, including many in Russian, with information from his own years of experience with the biology and ecology of the Coccinellidae, into this small book, and he has made the presentation especially interesting and meaningful by viewing the subject in the light of current biological concepts in entomology and ecology. The chapter on adult morphology by I. Kovář, that on morphology and taxonomy of larvae with keys to their identification by G. I. Savoïskaya and B. Klausnitzer, and that on variability and genetic studies by A. Honěk are mainly descriptive, but they are informative and useful. The remaining chapters, all written by Hodek, on life history and biological properties, distribution of habitats, food relations, dormancy, enemies, and effectiveness and utilization of coccinellids emphasize the causal relationships, which makes for interesting and enlightening reading.

There are no keys to adult coccinellids, but four keys to the larvae are presented. The main key is to subfamilies, tribes, and genera that occur in the Palearctic region. It is the most comprehensive key to coccinellid larvae that exists today and will provide the basis for future larval keys for coccinellids of other regions. There are also a key to 82 Palearctic species and a simple key to 46 European species which requires only the use of a hand lens. Also included on three fold-out plates is a colored pictorial dichotomous key to the common genera and species of European coccinellids. A duplicate of this key is contained in a cover pocket for use in the field. Some Nearctic *Scymnus* and *Hyperaspis* larvae cannot be treated in the keys since they do not have wax exudations. In addition to the field key plates, there are 160 figures of larval structures. Elsewhere in the text there are 15 colored plates of adults, larvae, and pupae of the most common Palearctic species. In addition to the numerous tables and graphs in the text, there are 58 photographs, some in color, of various coccinellids, their anatomy, habitats, and aggregations.

Among the illustrations of the three species chosen to depict the variability of elytral maculation within a species is one of the color pattern variation found in *Hippodamia convergens* taken from Johnson's 1910 paper on coccinellid variation. There is an error in this figure, for Johnson's taxonomy was of the pre-genitalic-character era and he included at least two other species under the variation shown for *H. convergens*.

Anyone interested in migration, aggregation, or diapause of insects should consult Hodek's treatment of these phenomena. The applied entomologist or ecologist interested in techniques for evaluating the impact of entomophagous predators on prey populations will be brought up to date in this field. And anyone from the layman to the specialist who is just interested in lady beetles not only will find the reading enjoyable but will have a key to the world literature on the biology of Coccinellidae.

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Interspecific War

Man against Tsetse. Struggle for Africa. JOHN J. MCKELVEY, JR. Cornell University Press, Ithaca, N.Y., 1973. xviii, 306 pp., illus. $12.50.

Man's struggle against man makes up the bulk of our history books: events that lead one nation to take up arms against another and injustices that lead to internal strife. The great pestilences are rarely given more than passing notice and then usually only in the context of their economic or sociological impact.

There are exceptions, of course, and McKelvey's *Man against Tsetse* is one of them. It is a history book dealing