MUTAGENICITY, CARCINOGENICITY AND TERATOGENICITY OF INDUSTRIAL POLLUTANTS. Edited by M. Kirsch-Volders. Plenum Press, New York and London. 1984. Pp. xiv+336. Price: \$(US) 45

This book, published in conjunction with the Belgium Environmental Mutagen Society, consists of four chapters each dealing with a specific class of pollutants (heavy metals, insecticides organic monomers and halogenated hydrocarbon solvents) prefaced by a chapter dealing with mechanisms whereby genetic mutations and chromosome aberrations are produced. Because it is a relatively small book the editor has been able to unify the contents of chapters 2–5 which are highly readable and informative. We are told something of the history of pollutants leading to recent production levels and a discussion of their chemical and biochemical properties introduces data on the mutagenic, carcinogenic and teratogenetic effects of each agent. Chapters are well supplied with tables and references and the discussions are more than just annotated notes.

This excellent production is sadly spoilt by the long delay in production. From the Reference lists the chapters appear to have been written in 1980, consequently the mutation data derives strongly from bacterial Ames' tests, predominant at that time, and the exciting relationships between oncogenes and cell growth factors/receptors are not mentioned. With the long production time of this book, one could reasonably have expected fewer typographical errors.

This book may find a place in the libraries of organisations interested in the specific pollutants covered. At the price it is probably a reasonable purchase for comprehensive reviews that are four years old, but for my money I would rather have a soft backed, camera-ready production of up-to-date information, a feeling I suspect shared by most researchers and one of which publishers would do well to take note.

DR JOHN M. BOYLE Christie Hospital and Holt Radium Institute, Manchester

ADAPTIVE BEHAVIOR AND LEARNING. J. E. R. Staddon. Cambridge University Press, Cambridge. 1984. Pp. xiii +555. Price: £30.00 (HB) £10.95 (PB)

This book is in the words of the author "designed to be accessible to advanced undergraduates with some knowledge of natural sciences. It assumes no knowledge of psychology but an acquaintance with graphs and the algebra of simple functions." Not so!—I do not envisage many undergraduates struggling through 550 pages.

It is quite simply a difficult book. O.K., Staddon has kept the text free of references and unnecessary experimental details, but has filled the space with a great deal of mathematical analysis. Furthermore, the personal touch would not appeal to all.

Where the book does score is in the way it has linked material that will be of interest to both psychologists and ethologists. Consequently even the most narrow-minded of psychologists will be able to read about conditioning, discrimination, memory and choice but the discussion of habituation, kineses and taxes, foraging and imprinting serves a wider audience. Staddon writes about animals other than rats and pigeons too, for instance, bees, ants and monkeys.

Conclusion: a challenging book, well worth reading but clearly not holiday material.

DR C. G. N. MASCIE-TAYLOR
Department of Physical Anthropology, University of Cambridge