

*A Treasury for Word Lovers*, by M.S. Freeman, ISI Press, Philadelphia, 1983, x + 333 pages. \$19.95 (Hardcover: ISBN 0-89495-026-6) or \$14.95 (Softcover: ISBN 0-89495-026-4).

This book, published by a subsidiary of the Institute of Scientific Information, is reviewed here in the hope that it will be consulted frequently by authors who submit papers in English to this journal. It is meant to provide a practical guide to correct word usage, and deals in a simple and readable way with aspects of grammar and punctuation as well as with words or expressions which are often used incorrectly. Examples, involving word confusions which appear frequently in manuscripts coming to me as a Regional Editor, include: alternate/alternative; as/like; assume/presume; can/may/might; differentiate/discriminate/distinguish; fortuitous/fortunate; implicate/involve; imply/infer; militate/mitigate; momentarily/momently; similar/same; specie/species; utilize/use.

Although the standards adopted by the author are severe and conservative, the style is entertaining, so that the book can be read for pleasure and not just used for reference. (For example, the word 'ambivalent' is illustrated by 'watching your mother-in-law drive over the cliff in your brand new Cadillac'.) I was surprised (not astonished) but pleased by the author's firmness, in face of the great weight of colloquial malpractice, concerning the use of 'due to'; in response to annoyed protests from baffled contributors to this journal I had almost completely abandoned replacing 'due to' by 'owing to' or 'because of' in a phrase such as 'the method failed due to ...', but my resolve has now been strengthened. I was astonished (not just surprised) by the author's assertion, in discussing the word 'million', that when a specific number is mentioned the singular is required, implying usage such as "Four million people was ..."; I do not intend to obey this instruction. There is no comment, unfortunately, on the great (dramatic?) increase in the use of the word 'dramatic' by scientific authors, when they usually mean 'large', but sometimes no more than 'unexpected'. The meaning of 'overlook' is dealt with, however; one of the expressions which occasionally relieve the tedium for me of correcting the English of foreign authors takes the form: "Overlooking the results we conclude that ...". Another; not considered in the book, runs along the lines: "When the reaction was complete, posterior addition of ...".

Potential readers should not be deterred by the title of the book; far from being a treasury for word lovers it is an elementary account of common mistakes, and this should increase its appeal to scientific authors, including those for whom English is a foreign language. I hope that the Institute of Scientific Information will consider publishing a supplementary volume dealing exclusively with common errors or infelicities in scientific papers. It could, for example, point out the difference between 'convert to' and 'convert into', so well exemplified some years ago by R.S. Cahn by "... the missionary converting a heathen to Christianity but a witch converting him into a frog." It might also consider the word 'educt', which is used increasingly by continental European authors with various meanings, all of them (in English) incorrect; the most common usage is in the sense of precursor or simply reactant, which is almost the exact opposite of the correct meaning (viz. that which is educed; i.e. extracted or drawn out of, from the Latin educare, to lead out). The word has a long-

established meaning in chemistry as "a body separated by the decomposition of another in which it previously existed as such, in contradistinction to 'product', which denotes a compound not previously existing but formed during the decomposition"; e.g. educts may be formed by dissociation of an adduct.

This book deserves a wide readership, which I hope will include many contributors to this journal.

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*The Chemistry of the Catalyzed Hydrogenation of Carbon Monoxide*, by G. Henrici-Olivé and S. Olivé, Springer Verlag, Heidelberg, 1984, ISBN 3-540-13292-9, pp. 231 + X, DM 146.

This is an ambitious book in that it attempts to be both a text book and a reference book, of value to the academic and the industrialist. This is probably misconceived, since very few Universities provide courses on hydrogenation of carbon monoxide which could justify the expense of this book for an undergraduate. That admitted, many people will find it useful as a reference book, and value its attempt to systematise diverse chemical observations.

The book starts in pedagogic mode, with discussions on metal-hydrogen and metal-carbon monoxide interactions. The conclusions are that hydrogen and carbon monoxide bond to bulk metals rather as they bond in complexes. Given the state of knowledge, this conclusion seems inevitable, and surely is of limited value. There follows a résumé of non-catalysed CO/H<sub>2</sub> interactions on metal surfaces and of selected key reactions in catalysis. This is all useful undergraduate teaching material.

From then on the book becomes more detailed and more sophisticated. It begins to broach a key question — the differences between bulk metals, metal surfaces, and isolated atoms — and then discusses, in turn, methanation, methanol synthesis, the Fischer-Tropsch synthesis, and, more superficially, hydroformylation, and the synthesis of polyalcohols.

The final chapters cover the uses of methanol and a synopsis of CO reactivity. Indeed, throughout the book the authors attempt to make generalisations, sometimes, it is true, rather trite, but at other times much more informative. The book itself represents what could become a new genre of text book, directed towards a specific subject which is used as a vehicle for expounding general principles. One can envisage this kind of production in a number of areas. Whether this particular book, in many ways a very useful one, is an isolated example or the first of many remains to be seen. However, the cost will certainly inhibit widespread circulation, which is a pity.

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