1. J. BRILLHART & J. L. SELFRIDGE, "Some factorizations of $2^n \pm 1$ and related results," *Math. Comp.*, v. 21, 1967, pp. 87–96.
2. SAMUEL YATES, "Factors of repunits," *J. Rec. Math.*, v. 3, 1970, pp. 114–119.

56[10].—RUDOLF KOCHENDÖRFFER, *Group Theory*, McGraw-Hill, London, 1970, vii + 297 pp., 24 cm. Price £5.–

This book, an English translation of the original 1966 German edition, provides an excellent introduction to group theory, with the emphasis placed on finite groups. Besides the standard topics, some fairly recent theorems (e.g., on Carter subgroups of solvable groups) are included.

The book is written very straightforwardly, with a minimum of notation and a maximum of clarity; in this respect, it compares favorably with other texts, such as *Group Theory* by W. R. Scott, which cover somewhat more ground at the expense of readability. There are 127 exercises, many of them being examples for the general theory (of these, however, 49 are concentrated in the first two chapters).

The author's choice of topics shows (in the reviewer's opinion) excellent taste. There are 13 chapters, as follows: groups and subgroups, homomorphisms, Sylow subgroups of finite groups, direct products, abelian groups, extensions of groups, permutation groups, monomial groups and the transfer, nilpotent and supersoluble groups, finite p-groups, finite soluble groups, miscellaneous topics (e.g., the Burnside Problem), representations (including proofs of theorems of Burnside and Frobenius). There is a useful bibliography of books and articles.

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57[12].—R. DUBUC, G. LAMBERT-CAREZ, M. GRATTON, L. ROY & A. SHAPIRO, *Dictionnaire Anglais-Francais, Francais-Anglais de l'Informatique*, Dunod, Quebec, 1971, xi + 214 pp., 22 cm. Price 24F, paperbound.

This book contains some six thousand words and phrases from the area of computer science, both in English and in French. Contrary to the usual concepts of lexicology, the authors have not attempted to record the current usage of the French scientific language in the field of computers. Rather, they have tried to invent a new language, since they feel that the current usage involves too much borrowing from the English vocabulary. While nobody can dispute this fact, it appears doubtful that their endeavor will have any measure of success. There seem to be two reasons for this: The first reason is that it is far from certain that French speaking computer specialists actually feel the need to purify the professional jargon they have been using for many years. The second reason for the probable failure of this enterprise is the proposed vocabulary itself. Many of the French words or phrases have been coined by the authors themselves, using some standard Latin or Greek roots, prefixes and suffixes. Besides the fact that one would expect the book to indicate clearly which phrase is extracted from the existing literature and which one is a creation of the authors, it turns out that many of the new words are unbelievably pedantic. Although most of these neologisms are, in fact, logically derived from the appropriate

roots, a large number of them are either so unfamiliar as to be difficult to remember or simply awfully discordant. Examples: 'programmoïde' for 'software', 'discotrope' for 'disk-oriented', 'ordinolingue' for 'in machine language', 'disque-programmothéque' for 'library disk'.

Besides these matters of principle, there are a number of lesser shortcomings. The translation sometimes lacks consistency: 'control card' becomes 'carte de controle' while 'control character' is translated as 'caractère de commande'. Even though the authors claim to have consulted a large body of existing literature, nowhere do they specifically reference their sources. They do not explain precisely what domain is covered by their dictionary: A number of terms related to electronics are included ('adjustable voltage divider'), but one finds almost no terms from the mathematical aspects of computer science or from the metatheory (how does one translate 'Algol-like' or 'context-free'?). Finally, some of the translations are inaccurate: e.g., 'actual size' translated by 'grandeur réelle' which in fact means 'real quantity' or 'real value'. In conclusion, even though French-speaking professionals may indeed feel the need for an accurate dictionary of computer science terms, it seems far from certain that this book will answer their needs.

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58[12].—T. F. FRY, *Computer Appreciation*, Philosophical Library, New York, 1971, viii + 237 pp., 23 cm. Price $15.00.

In the 237 pages of his book "Computer Appreciation", Mr. T. F. Fry has collected a comprehensive body of essential computer science material and presented it in an easy-to-read, easy-to-understand manner. This carefully worded book represents a worthwhile contribution to a field which, unfortunately, is all too often cluttered with so-called elementary books written in a language which only the sophisticated computer programmer can comprehend. Not so with Mr. Fry's book. He provides excellent reading for students of almost any basic course in computer science, and, more particularly, for students of business.

I believe the questions which are to be found at the end of each chapter are not only appropriate but also sufficiently stimulating to provide ample material for discussion in the class room.

If Mr. Fry is guilty of over-simplification, this is intentional rather than accidental and he is to be complimented rather than criticized. This book will not teach the reader *any* computer language, but it was not designed to do so. It succeeds very well in providing the necessary background for computer appreciation—which indeed, is the book's title.

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