

contradictory, all are well informed and absolutely current even when they describe events that happened fifty years ago. All reflect their authors' beliefs and enthusiasm.

This book will be very appreciated by all of those who are in the business of disseminating information, whatever its form. Students and professors will find there a rich source of information, and multiple themes for fascinating debates. The index will help them exploit its multiple facets.

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AITCHISON, Jean, GILCHRIST, Alan, BAWDEN, David. **Thesaurus construction and use : a practical manual**. 4th ed. London : Aslib, 2000. 218 p. ISBN 0-85142-446-5 (pbk).

Preamble

At the very start this reviewer should declare an interest: an affectionate partiality for the first edition, published in 1972. Predating the first national or international standards for thesaurus construction, that invaluable and concise booklet explained very clearly how a thesaurus should be designed and structured. Practical advice such as: "Use a thesaurus card or form for the recording of the terms selected . . . The form should be made out in duplicate . . . so that a copy may be filed and kept under each broad subject group to which it may be assigned," (p. 70-71) illuminated the systematic way of working which was, and remains, fundamental to sound thesaurus construction. In 1972, of course, there was no such thing as the personal computer to ease the business of card filling and filing.

Twenty-nine years later, having progressed to its fourth edition, the book has fully earned its reputation as a classic. Most readers of this review are probably familiar with one or more of the past editions. As well as noting key strengths, therefore, we

should look at how the content has adapted with the times.

The Core of the Manual

The core strengths of the book are in describing (a) the product — principally a monolingual thesaurus — one is trying to build, and (b) the best way to set about the task. After the major thesaurus standards emerged, the chapters on design, structure and content were substantially remodelled to follow and interpret their recommendations, in particular those of ISO 2788 (= BS 5723), ISO 5964 (= BS 6723) and ANSI/NISO Z39.19. Unsurprisingly, since both Aitchison and Gilchrist were active members of the standards committee most influential in developing the British and International Standards, the "remodelling" has involved considerable expansion but not contradiction of the earlier advice. Topics such as the choice and form of terms, specificity and compound terms, and basic thesaural relationships are very fully covered, with helpful elaboration on what is in the standards.

Forty-one pages are devoted to describing the huge variety of types of layout and display that may be found in conventionally published thesauri. For the first-time student, this chapter is a challenge, because it is hard to grasp the subtleties of the different ways in which the alphabetic and systematic sections of one thesaurus may inter-relate. But for the person who is seriously trying to design a reader-friendly and feasible layout for his own user group and circumstances, the collection and discussion of sample pages amply repays study. The disappointment in this chapter is that there are only two pages devoted to screen displays, despite the extensive, almost bewildering, variety that may be found among today's electronic thesauri. The ratio of 41:2 is a slightly unfair comparison, since parts of the descriptions of conventional displays do also apply to the electronic medium. Nonetheless, more could have been done to bring out the special opportunities as well as constraints presented by the screen, powered by the computer behind it.

Moving on to construction techniques, the authors take us right through from defining the subject field to checking the final product with experts. Their recommended method is intellectually impeccable. However, its roots in the paper-based era are rather too visible, as in the advice: "The display is written out, showing indenting and indicating ..." (p. 153) Perhaps "written out" was just a slip of the pen, or the

keyboard, but it is a symptom of the general lack of advice concerning the use of electronic tools. In place of the extract from the first edition quoted at the start of this review, we now have, "...a record should be kept of the terms selected on cards, or preferably, in machine-readable form." (p.148) But beyond this acknowledgement that the computer can help, there is little advice concerning efficient ways of using desktop tools such as spreadsheets and thesaurus management software. Furthermore, the heart of the construction method, relying heavily on faceted classification techniques, suffers from one practical snag: it is very hard to buy off-the-shelf thesaurus management software capable of manipulating facets and facet indicators in the recommended manner. For compilers in the league of publishing a profitable printed thesaurus, who can afford to commission their own software, there is no problem and every advantage to be gained from following the recommended procedures. But other thesauri, perhaps the majority, are produced on a shoe-string for in-house applications, and their compilers would benefit from practical hints on how to adapt the method if facets are not an option.

A section on notation, again giving sound advice, could have been updated rather more to reflect practices in the electronic era. Thus it claims that hospitality in notation is essential, making no reference to the system followed by, for example, the *Art & Architecture Thesaurus (AAT)*. (In the Internet version of the *AAT*, notation is irrelevant to the user, and is therefore not displayed. In the printed version, the notation is strictly ordinal, allowing no room between sequential numbers for hospitality. The trick that makes this possible is that the whole compilation can be renumbered automatically each time a new edition is issued.)

Supporting chapters

A brief but useful chapter on thesaurus management deals with maintenance procedures. It does include two-thirds of a page on software, but in this short space can do little more than provide references to more extensive sources of advice.

A six-page chapter on multilingual thesauri opens with the sentence: "The problems of multilingual thesaurus construction are no worse, in kind, than those of monolingual thesaurus construction; providing, of course, that there are competent linguists available." (p. 139) Yes, it is possible to argue that the increased difficulties are of number and degree, not of kind. Nonetheless, this is an understatement of the added

problems encountered in a multilingual context. The chapter repeats key provisions and examples from ISO 5964, and adds a little information concerning the different morphologies of different languages. But it omits any discussion of one fundamental issue: whether each language represented in the thesaurus must have identical structure (that is to say, whether each preferred term must have an equivalent in each of the other languages, with corresponding hierarchical and associative relationships.) The need to achieve identical structure is a basic assumption behind the provisions of ISO 5964, but has been disputed by some authors (Hudon, 2001; Riesthuis, 2000; Jorna and Davies (2001)), and so does need discussion. Neither is there any advice about handling diacritics, or the different systems of alphabetisation customary in different languages.

The final chapter of the book provides an overview of thesaurus reconciliation and integration projects, most of them research. It is a fascinating subject and no doubt today's explosion of inter-networking applications will increase the demand. As to evaluating the performance of integrated thesauri, there are regrettably few reports in the literature.

Final comparisons

Comparing again with the first edition, we note that 95 pages of A5 size have grown to 218 pages of A4 in the fourth. Between the third and fourth editions, however, the expansion is only of six pages. Additions to the bibliography alone have contributed three of the extra pages, and the Index another one. So what has changed in the text? Principally, the copious typographic errors present in the third edition have been corrected, a most welcome improvement. The text has also been adjusted to make reference to the additional literature included in the bibliography. The most substantive changes are in the short but important chapters that address the difficult question of whether a thesaurus is needed at all. A paragraph has been added to mention recent developments such as the emergence of "corporate taxonomies." And a new subsection discusses "the need for the thesaurus in the full-text era."

The (rewritten) Introduction to this latest edition describes a difficult decision that was taken at the time of preparing the third edition: whether to do a relatively straightforward update or to rewrite the book completely. The former was chosen. A total rewrite is a daunting prospect, but a large and admiring readership would assuredly welcome it in the fifth edition!

The core of the book will continue to be valid and valuable for a long time to come. But the context in which people are now applying thesauri is changing at a frantic pace. The relationship between thesauri and taxonomies deserves much more discussion; likewise the use of thesauri on the Internet and other networked systems.

Finally, let there be no mistake: this book is still a classic, and a most valuable work of reference. It is wholeheartedly recommended for novice and expert alike, in fact everyone seriously interested in using or developing thesauri.

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