The Use of Indexes

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The uses to which indexes are put are many and varied, depending upon the type of literature indexed and the person for whom the contents of the book are intended. Just as a map reference is the key to a position on an atlas, so the index should permit one to pin-point required information in a book, although this is generally limited to a page reference. How does one determine what should be included in an index? Firstly one must decide for whom the book is intended, and who, having read it, might later refer to it as a potential source of information. Is the title likely to attract a wider audience than suspected by the author, possibly to unfamiliar fields, and if so, should the indexer cater for these readers by including additional non-technical terms, or further cross-references?

Every index should be tailor-made to fit the book, taking into account its purpose and potential readership. Too many indexers launch forth into the fray on receipt of a few page-proofs, without adequate consideration and subsequent planning. Not that I advocate reading the entire text before starting to index. This is quite impossible with medical and scientific books, for example, but one should read the preliminaries, peruse the contents, study the lay-out, and base one’s index on the results of careful consideration. It is possible to change course mid-way through an index, or to make additions or alterations when editing, but it is far more satisfactory to spend time planning the campaign before starting the battle.

Ideally, indexes should cover the complete contents of books; chapters and sub-headings, plates, tables, diagrams, footnotes, references, bibliographies, and even prefaces and introductions if these contain useful information that is not available elsewhere in the book. Many books in the fields of science and medicine are inadequately indexed, and regrettably one must record that this also applies to the majority of books on librarianship. Some books are over-indexed, containing unnecessary entries that are not only useless, but clutter up the index. Perhaps these are compiled by indexers paid by the number of entries! Certain indexes appear to concentrate on the ephemeral, for example, including the titles of journals given in references, but failing to index the titles of chapters devoted to specific subjects. These are frequently omitted, the indexer erroneously assuming that because these are listed in the table of contents they need not be included in the index. The provision of inclusive pages is invaluable. This indicates lengthy treatment, and although major entries can be indicated by the use of bold or italic type, it is very useful to note that a specific number of pages is devoted to a particular topic.

An introductory note to an index can be very useful, particularly if it elucidates unusual arrangement, or innovations, yet how many readers urgently in search of information turn to the beginning of an index to see how it is arranged? Working in a library one can consult dozens of indexes within a short period looking for sources of information. Familiarity with the reference tools enables this to be done quickly and efficiently, but it is easy for the novice to overlook useful material.

The above notes suggest the main features of the ideal index, and this depends upon the nature of the book and its potential users. An elementary textbook requires a simple index, and as one progresses through more advanced textbooks, monographs, handbooks, reference works, and encyclopaedias rather more complex indexes are needed. Symposia, congress proceedings, colloquia and similar publications require adequate indexes, but seldom have them. Journals have indexes of varying standards, and it is usual for these
to have entries based almost entirely upon the names of the authors and the titles of the articles. Titles can be self-explanatory, and this should be insisted upon by editors, but they sometimes bear no relationship whatsoever to the text of the article. Indexers must devise their own subject headings, using the text, and particularly the summary. Fortunately there are excellent abstracting and indexing bibliographical tools in medicine and science, and periodicals are not generally used by readers in search of routine information.

This classification of the literature into various types enables one to attempt an investigation into the indexes we do find in these types, as distinct from what we should find. It is obvious that more comprehensive indexing is needed, and that the index should not be looked upon merely as a few pages of alphabetically arranged names and subjects mainly provided to placate reviewers. The index is the key to the contents of the book, and the continued use of any book as a reference source of information is dependent upon the adequacy of its index.

A random selection of six books devoted to scientific subjects was taken, and the indexes were examined:

(a) A book on intermediate physics with a chapter on isotropic dielectrics covering twenty pages has no entry under either heading in the index. There is a chapter devoted to vibrations of strings, rods and columns of gas, but there is no entry under ‘Strings’, although there are two page references under ‘Stretched string, frequency of vibration’, and a single page reference under ‘Vibrations of strings’. There are chapters on electrostatics (18pp.) with no entry in the index, and on calorimetry (29pp.), with a page number followed by ‘et seq’. These are a few examples from a very unsatisfactory index.

(b) A book on biology for medical students with a nineteen-page index in three columns. An extensive chapter on plant physiology (83pp.) is not mentioned in the index under either term, although there are entries under ‘Plant histology’, and ‘Plant movement’, but the references are not to this chapter. Inclusive pages are not provided, but where an extensive section is included, the words ‘et seq’ are given. To provide the final figures would require less space, e.g. 87-98, instead of 87 et seq. Apart from these criticisms, this index is fairly comprehensive and adequate, but I was momentarily stunned by the entries:

White Ants
— of egg

(c) An elementary book on botany has a ten-page index containing entries under the Family but not the Order of the flora described. Only the initial pages are given except for the subjects of chapters, for which inclusive pagination is provided. The term ‘Thallus’ has eight sub-headings, but is incomplete, there being no entries for Penicillium and Mucor, for example. The entry ‘Control of fungi’ is an example of several entries of doubtful value.

(d) A monograph on the renal circulation has a five-page index headed by a note stating that illustrations are noted by the use of bold type. The entries ‘Circulation of kidney’, and ‘Kidney, circulation of’ are followed by ‘see Renal circulation’, under which heading there are a few entries. All these headings are of doubtful value since the entire book is on this subject. The entry ‘Kidneys, human (see also Human kidneys)’ is followed by page references which are duplicated under the latter, in addition to numerous sub-headings not under the former heading. The references to authors in the text and in the bibliography are not indexed. Some of these are extensively quoted, and should appear in the index, which is quite inadequate in a research tool.

(e) A concise textbook on biochemistry has a note preceding the index stating that references to formulae are given in bold type, and the index itself is comprehensive and ideal for a work of this nature.
(f) The chemistry of terpenoids and ster-
oids suggests a complex index containing
terms incomprehensible to anyone except a
chemist. There is a chapter on plant steroids
(19pp.), but no entry under this, or under
‘Steroids, plant’. Nor are the chapters on
the Triterpenoids, the Sesquiterpenoids, and
the Monoterpenoids represented in the index.

A similar sample of clinical books was
taken, with the following results:

(g) A textbook of medical microbiology,
containing a good index in which inclusive
pagination is given to entries, but the con-
tents of the Appendices are not individually
indexed.

(h) A book on the clinical aspects of auto-
nomic pharmacology has two indexes, one
general (1½pp.) and the other a ‘Compound
index’ (1½pp.). This separation is unneces-
sary, and the index is very selective, many
paragraph headings not being included, and
inclusive pagination is not consistently given.

(i) An introductory book on fractures has
an index in which the main references are
printed in bold type, but under ‘Fractures’
all aspects of fractures are given as sub-head-
ings, and are duplicated under bones, types,
etc. This is unnecessary.

(j) In a general textbook of medicine, two
pages of ‘Useful data’ are included after the
index, and are neither paginated nor indexed,
although they are included in the table of
contents. Only the first page numbers are
given, even where an entire chapter is de-
voted to a subject, and since numerous topics
are mentioned several times, it is impossible
readily to locate the major references.

(k) A monograph on tumours has a forty-
one-page index in single columns to a text of
over a thousand pages. Inclusive pages are
provided to headings, but the heading ‘Cancer
(see Carcinoma, etc.)’ has six sub-head-
ings. There are numerous sub-headings and
sub-sub-headings, but this is unavoidable,
and the material is clearly set out. It is a
good index.

(l) The indexes to the individual volumes
of an encyclopaedia of medical practice have
so many sub-sub-sub-headings, covering in
some instances several pages, single-column,
that it is hopeless to attempt to use them.
The separate index to the set is a great im-
provement, and gives inclusive pages, but it
contains some very peculiar entries, e.g.:

Muscles, cervical rib, causing wasting of
Ophthalmia neonatorum, reservoirs of
infection

Pregnancy, diet in, goitre, prevention of

These examples indicate that few indexes
to medical and scientific books are adequate,
and one suspects that many of them were
compiled by the authors, their wives or sec-
retaries, with no flair for the task. An index
is an integral part of a book and should be
designed to fit the text. An advanced re-
search work should have an index that will
enable readers to locate required information
without delay. The elementary textbook
should be indexed with the same objective.
Even if one expects readers to peruse the
entire text, it is often necessary to refer back
to sections. Schoolchildren should be taught
how to use indexes properly, and teachers
should appreciate their potential value. But
firstly we must have sound, comprehensive
indexes which will guide readers precisely
to the information they require, indicate its
extent, and truly serve as essential append-
eges to the text matter. A shoddy index is a
particular abomination in the fields of re-
search concerned with science and medicine,
where time is especially precious, and the
speedy location of accurate information can
be vital.

BOSWELL'S LIFE OF JOHNSON
1783. aetat 75.

He would sometimes found his dislikes on
very slender circumstances. Happening one
day to mention Mr. Flexman, a dissenting
Minister, with some compliment to his exact
memory in chronological matters; the Doctor
replied, ‘Let me hear no more of him, Sir.
That is the fellow who made the index to my
Ramblers, and set down the name of Milton
thus:—Milton, Mr. John.’