# Book numbering: the importance of the ISBN 

Philip Bradley

The title-page of a book and its verso have changed little over the years. The contents still give the basic information required to identify a book-usually the author's name, title of book, edition, publisher, date and printer. In earlier times the printer's name was often relegated to the end of the book; although nowadays there is a greater tendency to indicate his importance by including him on the title-page verso. Two items now usually included were not even known about thirty years ago: Cataloguing in Publication (CIP) data, and an International Standard Book Number (ISBN). The CIP data is supplied by the British Library for British publications, by the Library of Congress for US books and by some other national libraries for their countries' publications. It consists of the catalogue entries provided by these libraries for their own use and helps other libraries in cataloguing books.

The other matter, the ISBN, is that concerning us here. While most readers buy or borrow a book only to read the text, not to try to make sense of a mass of technical bibliographical jargon which can appear quite forbidding, it is important to a few people who are involved in the recording of books.

The ISBN was introduced more or less contemporaneously with the computer, which, indeed, hastened its development, being essential to its effective use. The ISBN was introduced in the 1960s as the Standard Book Number (SBN) jointly by J. Whitaker \& Sons Ltd, the British National Bibliography and the Publishers Association who set up the Standard Book Numbering Agency (SBNA) for British publications. The SBN became the ISBN in the 1970s. The SBNA is administered from the offices of Whitaker, who have always been closely involved in its day-to-day running. An organization in the US similar to the SBNA looks after the interests of American publishers.

The ISBN consists of a group of symbols which identify each book title as a unique product. The number consists of ten digits divided into four groups, usually separated by dashes or spaces, each group having a specific function:

Group 1 a group identifier (language, geographical area or other convenient group), e.g. 0- (and more recently (-) English; 82- Norway; 977- Egypt
Group 2 publisher
Group 3 title
Group 4 check digit
The first group has one, two or three figures. The second contains from two to seven figures, based on the number of books the publisher expects to produce. Thus a prolific publisher such as Collins has a short number, 00, and the

Oxford University Press 19. A publisher who is expected to publish only a few titles has a long number. The third group is closely related to the second, indicating the number of titles produced: a publisher with a short 'publisher' number will have sufficient 'title' space for many titles, and vice versa. The fourth unit is not a group but always a single figure, sometimes the roman numeral X (which is used for 10 , which would give a total of eleven figures).

As an example of how the system works in practice we may look at the ISBN of a book recently reviewed in The Indexer, Richard Raper's Oxford history of England, Vol. 16: Consolidated index. The ISBN and the meaning of its parts are given below:


The principal purpose of the ISBN is to make the identification of any book as certain as possible. Assuming it is quoted correctly, one can be almost sure that the correct book has been identified even with no other information. When quoted with the author and title this becomes a certainty. Before the ISBN was introduced great care was required when ordering books from a bookseller, especially when there were different editions, impressions and reprints of the same title and where authors or titles were difficult to distinguish or were incorrectly quoted. Not only does each edition of the same title have its own number, but the same title produced in different formats usually has a different number for each. In such cases it is usual to print both on the verso title-page with an indication of the format. Books published jointly by two or more publishers have an ISBN for each; a book published in three for-mats-such as hardback, paperback and leatherbound-by two publishers, will have six ISBNs.

Most use of the ISBN is made by publishers, booksellers and librarians, in the course of their normal work. Booksellers use it when ordering books from publishers; indeed, some publishers request that the number be quoted and keep their stock arranged in that order. Librarians quote it (or should) when ordering books. Consequently it is usual for publishers to include it in their printed catalogues, and journals in their book reviews.

In libraries the ISBN is perhaps the most reliable identifying element in issue records. The books themselves are usually arranged on the shelves by subject and in the catalogue by author, title and subject, but with a computerized issue system the ISBN must be used. It is also essential for those libraries providing statistics for use under Public Lending Right, the system of remuneration of authors on the basis of the frequency of issue of their books. The figures are taken from the issues of a small, representative group of libraries. The ISBN, identical for the same title in any library, is the only practicable way of recording this information.

Some comprehensive booklists, such as Books in print and American books in print. can be searched on CD-ROM by means of the ISBN. If the searcher knows this number this may be quicker and more reliable than searching by author and title.

In practice, on a computer, the ten figures are used without being broken down into groups. Thus the OUP book mentioned above would appear on the computer as 0198217862 . Those responsible for allocating the numbers must ensure that the same figures with different groupings are not used, 01-9-821786-2 and 01-982-1786-2, for example. Because accidental transposition of numbers is easy, accuracy can be checked by subjecting the figures to a mathematical formula. Multiply the first figure (in the case of the OUP book this is 0 ) by 10 , the second (1) by 9 , the third by 8 and continue until the last figure is multiplied by 1 (if the last figure is X it is counted as 10 for this purpose). The answers are then added together and if the ISBN figures are correct the total is divisible by 11 without a remainder. The value of the check digit has been assigned to make this possible; if it is not so divisible, there is an error. It would be impracticable to check the figures for a large number of books by this method, but a computer can give an immediate answer. It is possible for an incorrect number to get through the net, but only remotely. Detection of random error is said to be well above 90 per cent.

In some books the ISBN is printed more than once: on the verso title-page, as part of the publisher's data, and perhaps in the CIP data (sometimes both British and American in the same book), and, especially in paperbacks, on the back cover above a bar-code. Other numbers may appear below the bar-code, and sometimes a smaller bar-code to the right with more figures:


From back cover of The Penguin spelling dictionary. Penguin. 1990.

There are thirteen digits below and of the last ten all but the last one are the same as the ISBN. The first three represent the product: 978 is the number for books. Again, the last figure is a check digit. The five figures above the second bar-code (and a second one is not always used) are for use in connection with price. This system is known in Europe as the European Article Number (EAN) and in the US as the Universal Product Code (UPC).

Occasionally a book appears without the printed ISBN, perhaps the work of an individual publishing privately who does not know, or bother about, the usual procedure. This is rectified, if the book comes to its notice, by the SBNA, which subsequently allocates a number, which, in the case of British publications, appears in due course in Books in print. A few books with no ISBN are apparently never picked up by the SBNA and never recorded in Books in print.

The journal equivalent of the ISBN is the ISSN (International Standard Serial Number). consisting of eight figures in two groups of four separated, like the ISBN, by a dash or space; the last figure is again a check digit. Each journal title has an individual number, retained throughout its life. To indicate the country of origin of a journal a nationality symbol, e.g. UK, may precede the number.

A few works, such as annual publications which are selfcontained works but also part of a series, have both an ISBN and an ISSN.

The ISBN was the subject of a British Standard publication in 1971, Specification for book mumbering. BS 4762: 1971, which has since been withdrawn. The American equivalent is a 16 -page booklet.' Ten pages of preliminaries include a list of participating bodies. one of which, the American Society of Indexers, was represented by Hans H. Wellisch. The six-page text deals with the construction of the ISBN and its location within a book; how to calculate the check digit: instructions for hyphenation of the ISBN: and functions of the Maintenance Agency. There is also a detailed work published, in French and English, by the National Library of Canada² and an SBNA publication ${ }^{3}$ (see The Indever 14 (3) April 1985, 228).

We should be thankful for the invention of the ISBN and the ISSN for the help they provide, and glad that some problems of recording books that were encountered in earlier day's are gone forever.

## References

I. Book mumbering: American Standard for book numbering. Rev. edn. New Brunswick. NJ and London: Transaction Publishers, Rutgers . . . University, 1989. x. 6 pp. 26 cm . ISBN $0-88738$-951-1: ISSN 1041-5653 (pbk): $\$ 30.00$ (ANSI/NISO Z39.21-1988). (Revision of 1973 edn.)
2. ISBN users' manual. Oltawa: National Library of Canada, 1984. 25pp. 23 cm . ISBN 0-662-53331-3.
3. ISBN: international standard book mumbering. 5th rev. edn. London: The Standard Book Numbering Agency Lid. 1983. 13 pp .25 cm . ISBN $0-949999-(05-9:$ £2.00. (There is a more recent edition of this - 6th edn., 1988.)

