

Numbers in indexing

Max McMaster

The author considers how best to handle numbers in different contexts, as index headings, subheadings or within index entries.

Introduction

Indexers are very familiar with numbers as locators, but numbers as main headings or numbers within entries can cause the indexer considerable angst in deciding how they should be entered or how they should be filed. Why is this so? The answer is because numbers as main headings are contentious. There may be several options for entering them, and several possible locations for filing them. The dilemma for the indexer is deciding which of the various options to choose.

The approach taken will depend on two factors: whether there is just an occasional number or many, and whether the numbers are main headings or subheadings. Numbers as

subheadings are generally easier to deal with. The reader, having arrived at the main heading, can glance at the subheadings and spot the numbers whether they are placed as the first subheading or further down the list.

In a few fields of endeavour, numbers as main headings or numbers within entries are significant. In military indexing, for example, entries for the 2/7th Australian Infantry Forces need to be dealt with correctly. Readers are directed to Forder (2011) for a guide to indexing the formation of armies and land forces. Music indexers also have to deal with numbers on a regular basis; for example, when working on numbered musical compositions. However, for most topics, there are very few guides on dealing with numbers. This paper attempts to address this deficiency by providing

Category	Discussion item	Suggested solutions
Title entry	H_2O : a bibliography	Index as H_2O , and file before Ha. Alternatively, file as spelled: H(Two)O, although this is less preferred.
Physics	Einstein's famous equation: $E=mc^2$ Where should this entry be filed?	File at the beginning of the E's. Also, provide an entry under Einstein and possibly energy, depending on the text.
	Snell's law (Law of refraction): $n_1 \sin \theta_1 = n_2 \sin \theta_2$	File at the beginning of the N's. Entries also required under Snell's law and Law of refraction.
Chemistry	t-butyl hydroperoxide di-t-butyl peroxyoxalate l,l-di-t-butyl peroxyoxalate	For university texts, ignore the t in filing. File the first entry under b for butyl. The second two should be filed under di-butyl, with the l,l ignored.
	2,4-D (2,4-dichlorophenoxyacetic acid) – a famous herbicide. It was most commonly referred to as 2,4-D. When combined with a defoliant called 2,4,5-T (2,4,5-trichlorophenoxyacetic acid), the mixture was known as 'Agent Orange'.	For a general audience, use 'Agent Orange'. For a technical work, 2,4-D should be filed using its full name under D. Similarly, file 2,4,5-T using its full name under T.
Mathematics	$y=ax^3$ $y=a/x$ $y=ax^2$ $y=x^2$ $y=(x+a)^2$ $y=-ax^2$ $y=x^3$ $y=(x+b)^2$	For a high school text, arrange in order of power and complexity. Also, for entries of the same power, file positive before negative. $y=a/x$ $y=x^2$ $y=(x+a)^2$ $y=(x+b)^2$ $y=ax^2$ $y=-ax^2$ $y=x^3$ $y=ax^3$ Remember $(x+a)^2$ expands to $x^2+2ax+a^2$.
	2D (two-dimensional) shapes 3D (three-dimensional) shapes	File as if spelled out.

Category	Discussion item	Suggested solutions
Radioisotopes (used in radiology)	¹³¹ I (iodine-131) ¹³ C (carbon-13) ⁹⁹ Tc (technetium-99)	Radioactive isotopes are filed under the name of the element. So carbon-13, iodine-131 and technetium-99.
Medicine – cranial nerves (all 12 of them)	first (olfactory) nerve second (optic) nerve third (oculomotor) nerve fourth (trochlear) nerve fifth (trigeminal) nerve	There are three options. File numerically under first cranial nerve, second cranial nerve, etc. Alternatively, use cranial nerve I, cranial nerve II, etc. The third option is to use olfactory nerve, optic nerve, etc. Double or even triple posting is advisable.
Medicine – multiple births	Twins Triplets Quadruplets Quintuplets	Double posting under multiple births and the specific number would be advisable.
Astronomy – galaxy names	M87 NGC 849 MCG-06-07-001, 4C37.11 SDSS J002240.91 + 143110.4	File at the beginning of each alphabetical letter, e.g. M87 would file at the beginning of the M's.
History – battles	First Battle of Ypres, 1914 Second Battle of Ypres, 1915 Third Battle of Ypres, 1917 (also referred to as the Battle of Passchendaele)	Ypres, First Battle (1914), etc., but double post with direct entries as well. Battle of Passchendaele will need double-posted entries or a cross-reference.
History – dates	17th century 1872 battles in Europe 6 June 1944 (D-Day landings in Normandy, World War II) Also, should it be World War II or Second World War?	File under seventeenth century. File by name of battle followed by year. Entry under the year is difficult to justify. Entry under D-Day (6 June 1944). Also entries under Normandy and France, invasion of (1944) World War II is probably the most common approach, but as always be guided by the text.
History – personal dates	Lambert, Alfred (1794–1846) Lambert, Alfred (1817) Lambert, Alfred (1822–1843) Lambert, Alfred (?–1798) In what order should these entries be filed?	Assuming Alfred Lambert (?–1798) is an adult, file this entry first, then file the rest chronologically.
Kings/Popes	Louis VI, the Fat (King of France) Louis VIII, the Lion (King of France) Louis XVI (King of France) Louis IX (King of France, commonly known as Saint Louis) In what order should these entries be filed?	File in numerical order. Some scholars prefer to use entries like “Louis VIII of France, King” rather than “Louis VIII the Lion”. Be guided by the publishing house. A cross-reference from Saint Louis would be required. “Louis IX, St” is also an acceptable option. The same approach applies to Popes.
Book/film titles	George Orwell's <i>1984</i> <i>1066 and All That</i> (book) <i>1001 Movies You Must See Before You Die</i> (book)	By convention, these titles are referred to in a specific way, so they should be filed as spoken, i.e. ‘Ten sixty-six’ or ‘One thousand and...’. Double posting by filing as numerals before the A's may also be warranted.
Olympiads	XXVth Olympiad (Barcelona, 1992) XXXth Olympiad (London, 2012)	File under Olympiads, then by numerical order. For a general text, also file by location, e.g. Barcelona Olympics (1992).
Telephone numbers	1300 numbers 1800 numbers 0800 numbers 16 numbers 19 numbers	The dilemma with filing these numbers comes down to how they are spoken. For the first example, do you say ‘one three hundred numbers’ or ‘thirteen hundred numbers’? As viewpoints vary, it is easier to treat them all as numerals and file them before the A's in numerical sequence, i.e. 16, 19, 800, 1300 and 1800.

Category	Discussion item	Suggested solutions
<i>InCalf</i> (artificial insemination procedures manual)	In this manual farmers were instructed to carry out certain procedures at designated intervals as follows: 24 hours 3 hours 1 day 12 hours 1 week 4 weeks 6 hours 7 days 1 month	A numerical sequence beginning with the 1's is not going to be logical. It is simpler to list from shortest time interval, so 3 hours, 6 hours, 12 hours, 24 hours, 1 day, 7 days, etc. Remember that 24 hours in this case is very different from 1 day. 24 hours is a very precise time period, whereas 1 day is less precise and means approximately 24 hours, i.e. anything from 23–25 hours. File before the A's, but also double post as subheadings under the particular procedure.
Taxation	Sometimes problems with numbers occur within subheadings, as in this example. Small business tax concessions 50% reduction 15-year exemption \$6 million net asset value threshold active asset test	As the numbers relate to different things – percentage, year and money, there is no commonality about the terms. So file numerically regardless, i.e. 15, 50, and then 6 million, followed by the alphabetical entries.

examples from a broad range of disciplines, together with suggested solutions.

The basic premise in deciding where to include a number in an entry or how to file it is to consider where a user would search for the information. Subject experts will almost look for more academic entries than will a general reader, so adjust your approach accordingly. Remember, though, if you cannot decide between two equally useful alternatives, then double post.

From a practical perspective, it will be necessary to force sort each entry so that they file in the correct place in the index. For example, whether you file '1984' before the A's as a numeral, or in the N's as though spelled 'Nineteen eighty-four', you will need to force sort. Each of the major indexing software packages has different mechanisms for achieving this.

Other pitfalls occur with the filing of numbers in subheadings; for example, first, second, third, fourth, etc. Since indexing software files alphabetically, force sorting into a logical order is required. Computers also file numbers according to ASCII, so 1, 100, 1,000, etc. will file before 2. In these cases due diligence is required.

As the above examples have shown, numbers occur across a broad range of endeavours. This paper has just scratched the surface, but the general principles for dealing with numbers in indexes should be clear.

References

- Forder, M. (2011) 'Military indexing: men and machines.' *The Indexer* 29(3): C1–C8.
Morton, J., Larcombe, M. and Little, S. (2003) *The InCalf book for dairy farmers*. South Melbourne: Dairy Australia.

Max McMaster has been a full-time freelance indexer for the past 21 years, working across a range of subjects with emphasis on the sciences, but covering environment, business, social sciences,

education and general trade titles as well. He has in excess of 2,000 indexes to his name. Max lectures on indexing to editing and publishing students at a number of Australian universities and is an instructor for the University of California, Berkeley Extension indexing course. He also runs indexing training courses for the Australian and New Zealand Society of Indexers (ANZSI) and other organizations throughout Australia and Singapore. Max has been awarded the AusSI Medal (now ANZSI Medal) for book indexing on three occasions. He is a Life Member of ANZSI.

Email: max.mcmaster@masterindexing.com

Knowledge on a roll

The relatively small format of the codex and the economy of writing on both sides of a sheet of parchment or papyrus so as to produce a convenient volume that can be held in the hand first attract notice, so far as we can tell, from the poet Martial in the late first century AD. In trying to promote his own work in this forum, he comments on the convenience of the small size of a codex, which he touts as ideal for reading on a trip. The codex was a revolution in book production that is comparable to the revolution of e-books today. Although it was slow to gain currency, its obvious advantages for circulation and readership were not lost on the early Christian church, which took the lead in issuing biblical material in this way. Once the codex gained traction, other religions, which depended on a wide diffusion of authoritative texts, adopted the format.

From Glen Bowersock, 'Knowledge on a roll' (a review of Greg Woolf et al, *Ancient libraries*), *Times Literary Supplement*, 11 October 2013.