

It ain't just what you say but the way that you say it: indexing a DVD

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Indexing the content of a DVD of a lecture series for an accompanying book-commentary raises several novel issues. Time codes have to be clearly referenced, entry headings have to reflect the way information is stored in auditory memory, and the rhetoric of lecturing has to be taken into account. The task is made more difficult by a general uncertainty over how a DVD index will actually be used. A warning is given about the way film-editing and subtitling procedures can adversely affect the indexer.

I have just had to do an indexing task for which I could find no precedent: how to index the content of a DVD. I am not talking about the contents. There are several systems available that will take a disc and index its files, scenes (such as those of a film), or tracks (of for example a music CD). I am talking about the actual data that these elements contain.

This is how the task came up. In mid-2009 Routledge published a DVD of three of my lectures, recorded in 2008 at the Shaw Theatre in London, timed to coincide with the publication of an autobiographical memoir (Crystal, 2009a, 2009b). The project was called 'The Future of Language', because the topics explored three ongoing trends in linguistic evolution – the rise of English as a global language, the crisis affecting the world's endangered languages, and the impact on language of electronically mediated communication. Each lecture lasted an hour.

Accompanying the DVD is a book providing a commentary on the lectures – a kind of 'book of the film', in which I outline the background to the topic, comment on points of linguistic usage, explain cultural allusions which might be obscure to the foreign viewer, make some teaching suggestions, and so on. This has a conventional index, in which the entries refer to the pages of the book. And there is a second index, referring to the content of the lectures.

What sort of index would enable users to find their way around a DVD? I looked for precedents but could not find any. The first question was how to identify topic locations in the DVD. Page numbers are irrelevant now. I opted for time points using lecture number, minutes and seconds. So in the following example, the entry on advertising pop-ups begins in lecture 3 at 27 minutes and 31 seconds, and ends ten seconds later. (The alphabetical organization is letter-by-letter.)

abbreviations in texting

myth 3.5.12–28

reality 3.6.50–7.38

academic study of language death 2.47.00–23

addicted to the internet 3.2.47–4.20

adopting and adapting English 1.47.31

advertisement series

Heineken 1.2.29–10.43

Tui 1.56.37–60.30

advertising pop-ups on the internet 3.27.31–41

An alternative would have been to index the whole DVD as if it were a single entity, in hours, minutes and seconds, but I felt this would be less useful. A series of three one-hour lectures is not like a three-hour film. The likely use of this material is one lecture at a time.

You will note I say 'likely use'. It is an axiom of indexing that the index should try to anticipate the needs of the user. But it is difficult to predict how people will use an audio index. Some will want only the most approximate of references to a topic on the disc. Others will want to know the exact location of a particular topic, such as a specific mention of Wordsworth or Caxton. I can imagine some users wanting to know the length of time devoted to a topic, perhaps in relation to the time available in a lesson. For example, they might wish to know that the 'how many people speak English?' module lasts nearly ten minutes (1.11.38–21.40). Maybe the disc will be used to illustrate points of pronunciation, grammar or vocabulary. I have no idea. I do not know anyone who has recorded their lectures in this way before, and I have no clear idea about how it might be used at home or in the classroom. In the absence of precedents for an audio index of this kind, I therefore opted for a reasonably detailed index, but stopped well short of a lexical concordance.

A small technical point was how to express the minutes and seconds when only single digits appear. I had four options:

- (1) *Treasure Island* 1.5.2
- (2) *Treasure Island* 1.05.02
- (3) *Treasure Island* 1.05.2
- (4) *Treasure Island* 1.5.02

Option (1) I felt was too far removed from what the user sees on the DVD, where the time coding uses zeroes for both minutes and seconds. However, option (2), inserting zeroes in all cases, added a great deal of visual clutter to the printed index, especially when a range was required, such as 3.01.05–03.06.

The choice between the remaining two options was essentially one of frequency: there are only nine single-digit minutes in an hour, but nine single-digit seconds in every minute. I therefore went for option (4), which maintained a stronger relationship with the DVD time coding.

How to phrase the entries? Recalling information in

relation to an audio or video recording is not like recalling it in relation to a book. In addition to specific topics, people remember especially prominent usages, stories, anecdotes and aphoristic expressions. This motivates a rather longer entry heading than is usual in book indexing, as illustrated here:

'best texters are best spellers' 3.9.37
'better the devil you know' 1.46.51
Biblical argument against multilingualism 2.31.10–33.00

The indexing of spoken language also motivates a more direct representation of the language as it occurred – again because that is the way people are likely to recall it. If at one point the lecturer says, 'why has English become a global language?', then this is how listeners are likely to remember it. A book indexer might legitimately paraphrase this in several ways, such as:

English, reasons for becoming global
global English, reasons for

But this takes the user well away from an audio recollection of the passage. In my index, accordingly, the relevant entry is:

'why has English become a global language?'

There are more entries ending in a question mark than in a conventional book index, as a result.

Another big difference is that entries send users to a single point in the DVD. This contrasts with book entries, where typically we might find:

advertising 33, 65, 78, 99–100

I felt it would not be useful to list a series of references after a heading in this way. It is not possible for people to 'flip through the pages' easily, as they could with a book. I may be wrong, but I do not think users would routinely want to do this with a DVD. In the absence of evidence, I decided to restrict my entries to single locations. As a result, the index has a somewhat 'minimalist' look about it.

A few interesting features emerged. One was the way in which, in a lecture, points are anticipated, made and recapitulated. A typical lecturing rhetoric goes like this:

Now in this lecture I'm going to talk about A, B and C
...
First, A ...
In this lecture I've talked about A, B and C ...

Hence the index contains such entries as the following:

Americanisms
in early 17th century 1.29.00–40
recapitulated 1.48.09
...
crisis in language study
introduced 2.8.39–11.12
recapitulated 3.6.35

Other points of lecturing rhetoric can be seen here:

internet
addiction 3.2.47–4.20
linguistics 3.13.14
myths 3.4.33–53
revolutionary or not? raised as question 3.16.31–44
revolutionary or not? tentative answer 3.34.46–54
sentence length 3.37.59–38.40
styles 3.37.57–38.56

And a point at which one of the lectures went wrong is illustrated here:

power of the people
cultural 1.40.28–41.50
economic 1.39.17–40.25
introduced (false start) 1.36.22–36
introduced (real start) 1.37.32–42.23

One has to be honest to the recording! In a book, nobody would ever know if I began a paragraph wrongly and later changed it. In a recorded lecture, the false trail is there for everyone to see – for ever! The same point applies to inadvertent errors. At one point I refer to Wilhelm von Humboldt instead of (I later realized) Alexander von Humboldt. The index, like the players in *Hamlet*, 'will tell all':

von Humboldt, Wilhelm [sic] 2.49.56

The generally 'wordier' appearance of the index entries can be seen in this next extract.

tabloid reports on world population 1.22.01–16
taking care in electronic communication 3.22.01–52
Tamasa language 2.53.16
Tarzan in chatrooms 3.2.00
'taxi and URL' story 3.3.40
technological power 1.38.08–39.15
television advertisement 0.6.51–8.00
1066, linguistic consequences 2.36.18
texting
difficulty in obtaining data 3.1.06–40
full of abbreviations? 3.5.12–28
harming English? 3.6.30–34
harming exam results? 3.5.58–6.18
harming literacy? myth 3.5.29–40
harming literacy? reality 3.6.19–29
harming spelling? myth 3.5.34–40
harming spelling? reality 3.9.28–10.01
invented by children? 3.5.23–28
myths 3.4.54–6.34
not full of abbreviations 3.6.50–7.38
not harming exam results 3.11.21–28
not harming literacy 3.11.29–12.28
not harming schoolwork 32.10.02–11.20
not harming spelling 3.9.28–10.01
not invented by children 3.7.39–9.27
when did you first use? 3.14.37–46
'texting is bad for you' 3.5.04

th, difficulty pronouncing 1.25.16–41
 'the cheque is in the mail' 1.58.21
 'the more you text, the better your literacy scores' 3.11.35
 'The only speaker of his tongue' 2.3.07–4.50
 'they've landed' in relation to the internet 3.26.46

No entry contains more than five lexical content words, as anything longer would begin to place a strain on the normal processing ability of auditory memory. I always have George Miller's 'magic number seven, plus or minus two' at the back of my mind (Miller, 1967).

I learned one important lesson, in preparing this index. Indexers often value the opportunity to compile a preliminary index, allowing an author the opportunity to eradicate various kinds of inconsistency. Beware this practice when working with a DVD! When I received the first disc of the lectures I wanted to get on with the index, as I was not sure what form it should have or how long it would take to compile. So I indexed the whole thing, thinking I would easily be able to tweak when I saw the final version. But the firm producing the DVD decided the recording needed 'tightening up' in places. This had the excellent result of making a better DVD; but it had the unfortunate result that all the timings became inaccurate. It was not possible simply to devise an algorithm, such as 'delete three seconds from all references in lecture 1', because the way the editor manipulated the pauses (and cut between shots, as there were two cameras used) was unpredictable. I had to do the whole thing all over again.

And then, after all that, I learned that the publishers had made a decision to give the DVD subtitles. A nice idea, but it meant 'more toil', as it was my responsibility to check the work done by the subtitling firm, and this meant a further

repeated listening to the three lectures. And when something needed changing, as it often did, I had to give the exact time point to the subtitlers. This was a much more detailed exercise than the indexing one, as it involved identifying the location of individual words and pauses. If I had done the subtitling exercise at the beginning, a huge amount of time would have been saved. Moral: check at the very outset if there are to be subtitles.

Things will, I have no doubt, get easier as technology improves. One day we will be able to do audio entry location using voice-activated technology: speaking a time-reference into our DVD player will make the machine take us directly to the relevant point. As we already have voice-activated answerphones, car dialling and washing machines, with similarly restricted command vocabularies, that day is not far off. Speech-to-text technology will automate subtitling and time locations, which will take a lot of the hassle out of this kind of exercise. At least people will not have to listen to their own lecture 20 times over. That way madness lies.

References

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 Miller, G. (1967) *The psychology of communication*. Baltimore, Md.: Penguin.

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Editorial continued

user-friendly (because people are familiar with it) to video-conferencing? And how about tweeting your way through a peer review? Social networking is in its infancy, just as the Internet once was. Dedicated users all point to ways in which the various systems need improving, and who knows what sharp turns may lie ahead. But I'm certainly not the sceptic I was six months ago.

And if I'm not, it's partly because of my experience at a couple of conferences I've been at recently – the IFLA Cataloguing and Indexing Section's Satellite Conference in Florence, 20–21 August, and the International Law Librarians' (IALL) Annual Course in Istanbul (11–15 October). A number of the IFLA Conference speakers (most of the papers are available at <http://www.ifla2009satellite-florence.it/meeting3/program/program.html>) took the role of folksonomies and social networking as a major theme. There was also, inevitably, a lot of gloom and doom

about the future of library cataloguing, with some of the libraries represented at the conference already having come to terms with the fact that today's students do not know their alphabet, and are not interested in context. (It was much the same story at the Lille Conference, on which I reported in April 2006.) More very lively debate. In Istanbul it was good to meet up with Meral Alakus (ISC/SCI) and her Turkish University and Research Librarians Association (UNAK) colleagues – the Indexer's 'Turkish' articles attracted a lot of attention amongst the IALL participants, and more Turkey-related articles are in the pipeline. But so too are lots of other things. 2010 promises good reading. In the meantime, just enjoy this issue, which should reach you well before the festive season closes in.

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