Indexes are in effect censored when ideas or materials are either excluded or indexed in such a way that the searcher will not find them. A poor index hides a lot. Such censorship may result from the indexer's own decisions about the content and structure of the index, or from factors beyond his control such as the limits imposed by publishers' requirements or the overlapping of old and new terms. The application of computers to indexing may provide far more speedy access for certain groups in large corporations and universities, but may create barriers for the ordinary student or public library user. Co-operative action is needed to ensure that indexes give all users maximum access to information. Through their professional societies, indexers must seek to improve the quality and training of entrants to the profession and enable experienced indexers to learn new computer-based techniques; they must work jointly with publishers to explore ways of providing better indexes without prohibitive increases in the cost of books; and they must join with other information professionals to solve shared problems.

What is censorship in indexing?

We usually think of censorship as the absence or removal of the item to be censored. It may be made unavailable for purchase—there are plenty of examples of this, from *Lady Chatterley's Lover* and *Ulysses* to domestic texts and films that are removed from distribution; or, if a work is available in the marketplace, it may not be purchased for a library collection—the traditional gatekeeping function of selection and selective acquisition is usually viewed in this context, with the responsibility for making such decisions resting with a trained professional.

There is, however, another kind of censorship in which the item is there but is shielded from public access. What comes to mind is the office collection or its equivalent, in the library: materials purchased for some, but not all, of the library's users and kept apart from the rest of the collections. In the public library where I worked, the office collection contained such books as *Show me!* and *The sensuous woman*, as well as a Bible that cost several hundred dollars. Censorship, like politics, makes strange shelf-fellows. In this public library, it was not only the controversial or sexual content of a work that qualified it for the office collection, but also its price.

This kind of censorship also includes items kept behind librarians' desks, sometimes to control pilferage and sometimes because the librarian is exercising a minor perquisite of office, first rights to popular materials. Either way, the effect is the same—to make those materials unavailable to the general public of the institution.

By their very nature, indexes are tools of discovery. William Frederick Poole began to index articles in periodicals in the nineteenth century to help his colleagues find items relating to their areas of interest—items that were not made apparent by ordinary catalogues, which do not give access to parts of titles, only to the titles themselves. Perhaps that is why it is so hard to think of an index as being used to withhold information from the public. Back-of-the-book indexes enumerate ideas contained in texts that would be very time-consuming and difficult to find without their aid. When one uses a book such as Thayer's biography of Ludwig van Beethoven—a tome of more than a thousand pages containing extensively detailed descriptions of the composer's life—the index is indispensable unless one wants to spend weeks or even months on the project. For periodicals or materials in particular subject areas, indexes are even more essential to systematic research, because few individuals can obtain the information by reading all the issues of all the periodicals indexed with or without additional materials such as monographs, patents, cases or whatever else is applicable.

Are we part of the topsy-turvy world of Orwell's *Nineteen eighty-four* where truth is lies and war is peace? Is it possible for an index to be a tool of censorship? Unfortunately, the answer is yes: it is possible, and it happens all the time that indexes effectively bury materials. This is not deliberate, nor is it a carefully planned result of either the structure of the tool itself or the process. Nevertheless, it is inextricably part of both.

Censorship in indexing is of both the above types. Indexers may decide to exclude items from an index because the policy of that index is to exclude them—the absence form of censorship; or they may index the items in such a way that they are shielded from discovery—the here-but-can't-be-found type. Back-of-the-book indexers may also choose to exclude topics that do not meet their criteria for acceptability, but as they often use
the author's own words, they are less likely to be guilty of certain sins of commission than their periodical-indexing colleagues.

There are several different forms of the here-but-can't-be-found kind of censorship. When an article is about the acquisition of periodical indexes by academic libraries, it ought to be accessible through any one of its three subject areas: the function, acquisition; the type of material, periodical indexes; and the type of library, academic libraries. It may be so accessible, but it is more likely that the item will appear under some combination of these topics that effectively hides it from the person who searches for a subordinate aspect only. For example, the accepted heading might combine type of library and type of material, i.e. periodical indexes in academic libraries. It could combine function and type of library, i.e. acquisition in academic libraries. The third element might be a subheading under one of these. In order to find this article, a searcher has to know the heading structure of the index. What will be the main heading? subheading? compound heading? Will the article be given all of these headings or only one? Will there be cross-references to lead searchers from one heading to another? This illustrates one of the inherent problems leading to censorship—that the multi-dimensionality of indexable ideas cannot be reflected within a particular indexing structure.

In an examination of the headings from Library literature, overlaps and duplications appeared in many places: for example, 'Periodicals—selection' and 'Library acquisitions: practice and theory (periodicals)'. Even more exasperating, 'Indexes and abstracts' was both a main heading with four 'see also' headings and a subheading under forty-four separate topics! Analysis of the articles appearing under these headings showed that some which might have been indexed in more than one place were not, and the basis for the choices made was not readily apparent. Searching thus becomes a complicated process whereby no one reading will lead to all materials on a particular topic. Only by searching all possible overlapping and related headings can one be sure to find everything. This certainly prevents some searchers from finding some materials because they do not persist beyond one or two headings. While not directed at any particular item, the presence of overlapping index terms tends to bury—or shield from being found easily—everything being indexed. So far, two factors tending to create barriers to access have been described: heading structures that may not provide access to multi-dimensional subjects, and overlapping and related terms that tend to fragment rather than collocate materials on a topic. A third element resulting in a form of censorship is the terminology used in the index. If the index does not have a term used by a searcher and does not provide a 'see' reference from it to the term actually used, materials on that subject are effectively screened from the searcher's view.

Many terms are used in a field for years before entering the vocabulary of its indexes. One example is 'systems analysis', which was used in libraries long before entering the vocabulary of Library literature in its 1964 66 volume. If terminology lags behind usage—and there seems no doubt that it does, though perhaps for perfectly good reasons—indexed materials are always out of the reach of those searchers who have entered the field most recently and are unaware of older terminology. Also the newer terms, when used, may overlap the older ones, as for example 'systems analysis' overlaps the older term 'operations research'. They do not mean exactly the same thing, but there are materials in older issues of Library literature which would now be put under 'systems analysis' but were indexed under 'operations research' when that was the only heading in use. When the index is searched and there is no 'systems analysis' heading, which happened to me the first time I researched this topic working backwards from 1981, one assumes that nothing was written on that topic in that particular year. Only after searching through volumes covering half a dozen years and finding nothing at all on a hot topic like 'systems analysis' did I realize this was because the heading did not yet exist in the index. All the criteria by which we judge the merit of an index measure, as well, its ability to reveal materials rather than hide them. A poor index hides a lot. Isn't this similar to buying a controversial book like Show me! and then shelving it out of sight behind the librarian's desk? Anyone can obtain the material in the latter case by asking for it or, in the case of indexed material in books or journals, by reading the whole work or body of work. But—and this is the point—if the researcher or the lay person believes the book will be on the shelf if it is available, or will appear in the index in the form used if it is indexed, and it is or does not, then that person is likely to assume it is not there. The lesson of The purloined letter, in which the missing item is in full view, is well known. Mystery writers from Poe to Isaac Asimov have used this device most effectively. In an index, whether a back-of-the-book or a periodical or subject index, the same technique is possible and here too, given the constraints of cost, time, space and energy, an idea is often made invisible while in full view.

The first question posed, 'What is censorship in indexing?', is answered. It is one of two things: either exclusion from indexing of certain ideas or materials, or indexing them in such a way that they are not found. Because the function of an index is to bring out ideas and materials from a mass of stuff, searchers rely on it and assume that an item not found in the index, for whatever reason, is missing from the indexed work. Should we care?

The next question, 'Should we care?', depends on a
value judgment which can be made only in relative terms. Many arguments can be mustered on the negative side. In the first place, most individual indexers do not choose the policies which decide how indexes are created. For individual books and multi-item works alike, they are determined by publishers, by the requirements of schedules, printing costs, page limits, and so forth. An indexer agrees to limit a back-of-the-book index to a certain number of pages or agrees, when working for Library literature, to follow the policies and procedures laid down for this work. Before 'systems analysis' was accepted as a valid term, an indexer would not have unilaterally included it. It might be used in only one or two works and then permanently dropped from the literature. How is the indexer to decide, the first time a term is encountered, whether it will continue in use and popularity? There has to be some mechanism whereby faddish terms are ignored and only those with ongoing meaning are added to the lists. Otherwise the fragmentation of material under overlapping and synonymous headings would increase as the terms proliferated, thus creating a different but equally problematic kind of censorship.

If individual indexers do not control the environment—the funds invested, the costs of production, the price ultimately charged to the customer, and so forth—what is the purpose of caring about the censorship that results when indexes contain too few terms, or lack the artistic typography that could help to create a visually better index, or when the indexer was not allowed enough time to do a really good job? Can a professional take to heart a problem over which he has little hope of exerting any real power?

Indexers themselves must answer that question. If publishers are governed by profits and markets, what forces govern professional indexers? Hopefully, one of those forces is responsibility—to users of indexes along with authors, publishers, and fellow indexers. Is the importance of overcoming the tendencies of their work to limit access, as well as to expand it, sufficiently emphasized to students and new professionals? Is attention to quality rewarded? High-quality indexes have the least censorship potential. Are indexers sensitive to the problems of index users? How should these problems be tackled? Is the solution purely intellectual? How can the environmental limits be coped with?

There is also a new problem which should make indexers anxious to resolve some of the intellectual issues. The application of computers to indexing has many implications, some not yet fully perceived, some already the subject of current debate in the library world—for example, who should pay for online services, and who will be able to deal directly with them. Though computers will probably not replace human indexers in the foreseeable future, they will radically alter the products they help to create. Indeed, they have already begun to do so. What are indexers doing to direct and influence this process?

People with access to online services are delighted by the speed with which they can be served. If I go to the shelf on a day in February 1984 and the latest issue of Library literature there is dated October 1983, I feel I am four months or more behind. But when I tune in to an online system, I may have coverage up to and including last week, if that is how often tapes are prepared and loaded, or last month, or even yesterday. Also, with a single inquiry I can find out whether new materials I want to see are listed in any of dozens of indexes by simply transferring my search procedure from one index to another. Furthermore, when I find what I want, I can order it online and expect to receive it in print form within a few days if the source is not available in my location, or immediately if the text is available in my library or in electronic form. Speed is one of the chief attributes which make online indexes superior to the old familiar variety. But will access to this speed be limited to certain groups in large corporations and universities, or will it be equally accessible to the ordinary student or public library client?

As yet no one really knows, but one of the probabilities is that those without such resources will be less able to participate fully in the new information age. What new variety of censorship, of a different kind from the intellectual censorship discussed above, will emerge from this state of affairs? If people cannot deal with library catalogues and need help in using The readers' guide, how are they going to manipulate DIALOG? Will user-unfriendliness be even more limiting than outdated terminology, lack of space, and other pressures on current systems?

What will happen to all of us indexers when artificial intelligence is applied to our milieu, one shudders to think. But it certainly gives us a reason for caring about the problems of indexing and censorship on all levels.

What can be done?

This leads to the final question, 'What can be done?' The mind boggles at the thought of an index created by an artificial intelligence and disseminated by a user-unfriendly system. Let us consider what some colleagues in other branches of information service have done. Libraries are dealing with problems—especially those relating to limits on money, time and staff—through cooperative activity. Can this model be applied to indexing? And if so, how?

Indexing is traditionally a lonely profession and indexers, especially those who work as freelances on back-of-the-book indexes, tend to work in isolation from others like themselves. There are few establishments where large numbers of indexers work side by side and daily have the opportunity to exchange ideas, discuss
new solutions to current problems, and try these out. One of the few places where indexers regularly come together to talk about common problems is at meetings of the American Society of Indexers. This organization is a focus of the kind of co-operative activity that can help to deal with the factors which prevent indexes from giving maximum access to information. Three areas seem to demand immediate attention.

First, there is education. Indexers must be more militant about monitoring what is being taught to potential indexers in library and information science programs. Perhaps this is not the first step, but should be preceded by an inquiry into the qualifications needed by people who enrol for courses in indexing. What are the qualities and educational attainments of a good indexer? Should there be any entrance requirements besides a willingness to do the job? How can the applicant’s analytical eye, vocabulary appreciation, and knowledge of a field be tested? Should they be tested? Is a course with a good instructor enough to teach someone how to index? Should apprenticeships be organized in order to certify professional indexers? What quality controls can the profession apply to itself, if indeed this is thought to be a good thing? What about the initiation of indexers of long standing (not necessarily old indexers) into the mysteries of computer-based procedures? Will these veterans be cast aside because they lack the technical skills in demand today?

Secondly, there is political leverage with authors, publishers, and index users. If librarians are the least visible members of the intellectual world, then indexers are probably among the least visible members of the library and information world. Yet the advance of knowledge and the education of all researchers in all disciplines is dependent on the tools created by legions of indexers.

After years of hard work, perhaps we have convinced publishers that a book's value is enhanced by a good index. But the job is not finished, and attention to costs must be included in the continued drive for high-quality indexes. This is not to say that indexers should be paid less—far from it. But it will do no good to lobby for the index nor to price the book out of its market. Increasing beyond even today's incredible prices. And it is not so much what you say...