

NEWSLETTER ----- DECEMBER 1976

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TUESDAY, DECEMBER 7TH

at C.S.I.R.O., 314 Albert St., East Melbourne

at 8p.m.

Sherry will be served at 7.30p.m.

The programme will include reports from

Ed Lewis, Dorothy Prescott and Jean Uhl

on their current indexing activity

and a report from the Programme Committee

on suggestions for 1977.

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AUSTRALIAN SOCIETY OF INDEXERS

Office bearers - 1976-77:

President: Clyde Garrow, C.S.I.R.O., 314 Albert Street,
East Melbourne.

Vice-President: John Simkin, City of Moorabbin Library,
161 Jasper Road, Bentleigh.

Secretary: Sylvia Ramsden, 62 Don Road, Healesville, 3777.

Treasurer: Joan Haughton, 74 Normanby Road, Kew, 3101.

Committee members: Jean Hagger, Department of Librarianship,
R.M.I.T.

John Hawker, 26 McIlwrick Street, Windsor.

Ed Lewis, 1 Psychological Research Unit,
Commonwealth Department of
Defence.

Coral Muntz, C.S.I.R.O.

Membership fees for 1976-77 are now due and have been set at \$10. Members who joined the Society between 1st July and 30th September receive a credit of \$2.50 and should pay \$7.50 for this year. Cheques should be made payable to "Australian Society of Indexers" and forwarded to the Secretary at the address above.

'When I use a word' Humpty Dumpty said in rather a scornful tone 'it means just what I choose it to mean - neither more nor less.'

'The question is' said Alice 'whether you *can* make a word mean so many different things.'

'The question is' said Humpty Dumpty 'which is to be the master - that's all.'

(Lewis Carroll, *Alice through the looking glass*)

The Australian Society of Indexers was launched in April 1976 and is now beginning to travel on what we all are sure will be an exciting voyage of discovery and achievement in the years ahead.

Effective indexing is one of the most important factors in ensuring the retrieval of information. It is a field which has seen significant advances in recent times, stimulated perhaps by the introduction of computer technology. There seems little doubt that computer storage and retrieval provides us with the *modus operandi* for controlling the flood of information that is threatening to overwhelm us all, irrespective of our special fields of interest, be it the humanities or science, or for the man in the street striving to be well informed..

Unfortunately, it is not at all clear to editors, publishers, managers, politicians, scientists or whosoever are in positions of responsibility for determining the preparation of primary information that effective and appropriate indexing is vital and will become increasingly so. This is not their fault. The fault is ours. We must develop effective means of communication. This is a great challenge for the Society.

Clyde Garrow, President.

Catalogues, indexes, thesauri : a continuum

John McKinlay

La Trobe University Library

All of us spend time using and making indexes. We use library catalogues. We browse along library shelves. We search indexes to books and periodicals. We consult indexes, abstracts and bibliographies which cover a variety of print and non-print material. These are devised and constructed by many individuals and organizations, for a variety of users and purposes, in many different forms and according to a multitude of theories. It is not the diversity, which is obvious, but the underlying unity, which has often been assumed, but not always examined with any care.

When I consult a library catalogue, or an indexing service, or hunt in indexes or on shelves, I do not feel as if I am doing several different things. I *do* feel that I am doing the one thing in several different ways. I *do* have to restructure my approach to match the specific medium, but there is nothing special in that. I often have to do that when moving, say from one encyclopedia to another. *Larousse* and *Brittanica* are both encyclopedias; it is just a matter of style and constraints. There are also, with indexes, varying distances between the information identified and the information located. But even that does not seem to be a very solid basis on which to propound a theory.

There is a common, if not total agreement that something binds together the objects of my talk; there is an essential unity beneath the apparent diversity. We can, for example, find statements like the following:

"An index is a systematic guide to items contained in, or concepts derived from a collection. These items or derived concepts are represented by entries arranged in a known or stated searchable order, such as alphabetical, chronological or numerical".

This definition is from the ANSI USA *Standard basic criteria for indexes* (1968). It goes on to define collection - roughly, any book, article, etc., or any part of these; and entry (presumably, an index entry), which consists of a means of identifying and locating the item or the concept. So far, so good. As a set the definitions can be faulted on the basis of logic and language, but it is significant to note that an attempt has been made to state and define a common ground and to recognize diversity and unity.

Indexes can be considered in several ways, on several levels of increasing complexity. The first could be called the functional - it is concerned with the description and evaluation of indexes. The second might be called the definitional or the expository level - it concerns the analysis of the index itself, its parts and their relationships, and leads to some kind of categorization of indexes. The third level is the conceptional - dealing with the nature of indexes and the indexing process itself.

It is perhaps not surprising that it is the functional level which has been most thoroughly investigated, because it involves the assessment of indexes from the users' point of view, and from the viewpoint of index management. Even so, the history of these studies is relatively short. I shall consider some of the issues because they demonstrate the potential general nature of index theory.

Two factors which have a basic effect on the efficiency of any system of indexing are *exhaustivity* and *specificity*. *Exhaustivity* is the extent to which all the classes to which an item belongs are identified. Obviously there are severe gradations of exhaustivity. A book in a library is generally only classified in one place. In a library subject catalogue,

whether alphabetical or classified, it may be represented by 2 or 3 entries. In a more complex information retrieval system it may be represented by up to 20 or 30 entries. And the book itself may have an index of, say, 1,000 entries. This represents an obvious increase in exhaustivity, but not necessarily an increase in value. Each index may be quite adequate for the kind of requests made of it. Alternatively, it may not, but the number of entries is not the sole criterion for assessing this. The kinds of requests made of particular systems is an area which has been inadequately studied.

Specificity is the extent to which the index entries are an exact reflection of the classes which they identify. Again, the size of the index is not, as such, relevant nor is the complexity of the index entry itself.

These two factors will affect the recall and precision performance of an index. *Recall* is the ability to extract from a document, when you need it, all the relevant items or concepts which are there. *Precision* is an assessment of the amount of gold that you pan out with the dirt. Both of these concepts are as applicable to library classification as they are to any other kind of system. We all know the frustration of hunting through books on library shelves, or checking index entries, which prove to be irrelevant to our needs. We also know the frustration of having missed, or of not being able to find again, the exact information which we are seeking when we suspect that it is really there all the time.

Recall and precision can be improved, at a price, and at a price to each other. Broad classification is great for recall, or for serendipity, but is dreadful for precision. Some book indexes are marvellous for precision, but dreadful if you are not exactly sure what it is you are seeking.

There are many ways of improving recall by control of synonyms, quasi-synonyms, word forms; by hierarchical groupings in a variety of marvellous mathematical forms, etc. Precision devices include coordination (pre- and post-), linking of terms, relational indicators, sub-headings, and so on. Some of these have greater significance to one form of index than another, but there is usually an analogy which can be made.

This suggests another way of looking at indexes, by a variety of dichotomies, such as controlled v. free vocabularies, or closed v. open-ended vocabularies. An index to a single work by a single author can generally rely quite confidently on derivative indexing methods -- we should, after all, be able to depend on an author's own vocabulary control. But as soon as there is more than one author, or more than one document, some kind of control is essential. This is not to suggest that indexes must have controlled vocabularies. Natural language indexing has many advantages in many circumstances. The user searching a natural language index has the most urgent need for access to a fully controlled vocabulary, but it can be external to the index, and be *descriptive* rather than *prescriptive*. In on-line information retrieval systems descriptive indexes have exciting possibilities.

Another dichotomy is between precoordinate and postcoordinate indexes. It is an article of faith for many indexers that postcoordination implies mechanical aids. True, there are printed coordinate indexes, but they are pretty horrific. However, it should be noted that controlled vocabularies often force decisions which only make sense by postcoordination. A subject heading list can also be said to have either forsaken precision or to be begging postcoordination.

A final dichotomy which could be mentioned is enumeration v. synthesis. Some subject heading lists and library classifications are very enumerative. Thesauri and certain classifications are highly synthetic. It does not really matter. In all things, the real problem is to be relevant to the task, and adequate for the needs of the user.

This level of indexing theory I have called the functional. It concerns the operation of an index, and it assumes that indexing is a service operation, subject to management and other constraints. In the next level we need to look at the definition of the elements of an index, and here the problems start to become more complex.

There are as many definitions of indexing as there are writings on the subject.

I have chosen three sets of definitions to analyse. They begin from rather different points of view, and have different intentions. One I have mentioned already - the ANSI USA *Standard basic criteria for indexes* of 1968. A second is contained in E.J. Coates' book *Subject Catalogues* of 1960. The third is a terminology of coordinate indexing by J.L. Jolley, Chairman of the Aslib Coordinate Indexing Group, and is the most recently published, in 1976. You could regard these approaches as representing those of the traditional indexer, the cataloguer, and the information scientist.

When I first entered librarianship, Coates' book was newly published. It seemed, at the time, if not a radical at least a revolutionary book. Reading it 15 years later it strikes one as very traditional if not conservative. This is in part a reflection that the book helped to shape the future. Coates refers to his basic component as a *subject catalogue*, defined as any kind of record which directs an inquirer from subject terms to the documents dealing with them. Document is used in extended sense to cover any form of graphic, acoustic or haptic record. Subject terms are represented by *subject headings*, which are defined as the *statement* of the subject of a document. Two points should be noted here. The first is that it is a document which is indexed, and not the ideas, information, etc., which is contained in it. A book index would seem to be excluded from these definitions. Secondly, the connection between the document and the subject terms is presumed, but not explained. Coates recognizes that the catalogue and index have, in popular usage, different meanings - that is one includes some document description and the other does not - but he regards the distinctions as neither hard nor fast.

The subject heading stands at the head of a *subject entry*, and its substance and form determines the structure and arrangement of the catalogue. He defines three types of catalogue - alphabetico-specific, alphabetico-classed, and classified. The first two involve using words as subject headings. Apart from that, the distinction is not very clear. The classified order, he says, is *systematic* (his word) and exhibits the hierarchical relationship between subjects. Systematic is not defined. Is the alphabet not systematic, "methodical, according to a plan, not casual or sporadic or unintentional"?

Whatever the answer to this, note must be made of his use of the word hierarchical, which he also does not define. Hierarchy might be defined as "a body of persons or things ranked in grades, orders, or classes, one above another", especially in natural science or logic. How much classification is hierarchical, and is hierarchy essential to it? Coates says that, in a classified catalogue, the subject heading consists of a classification symbol, with or without its verbal equivalent. Why is a classification symbol necessary? A classification is still a classification without it, and even an index can work without it, provided that some other location device is substituted instead. Finally, it may be noted that Coates' alphabetical/classified dichotomy does not recognize the variety of other orders, numerical, chronological, etc., which may legitimately exist.

The final step in Coates' Scheme of definitions, as far as we need to take it, is *subject entry*, which consists of a subject heading, a document *description*, and a *location*. There are

obvious problems here. Book indexes generally will not have descriptions, but they will have locations. A bibliography will have descriptions, but not necessarily locations. Coates does not say it but the implication is that either one or the other of these elements must be present, but sometimes both are.

This is quite an interesting set of definitions. It attempts to be of wide generality, and it defines many of the essential elements, except possibly the most fundamental.

Now, by contrast, let us look at the ANSI statement. In it, an *index* (Coates' subject catalogue) is a systematic guide to *items* or *concepts* derived from a collection. *Collection* is a much broader term than Coates' document, as it is used to denote any body of materials indexed. Coates had no equivalent to concepts, although concepts are presumably what the statement of the subject in the document is about. Or, at least, it is concepts which are transformed into subject statements. Unfortunately ANSI has nothing further to say about concepts, and they are not defined.

For ANSI, an index is a systematic guide. This is certainly a better use of the word systematic than by Coates. What it is that is systematically arranged is the *index entry*, which consists of a means of *identifying* the item or concept, and a means of *locating* it. The second part of the definition presents no particular problems. Locators are presumed to normally be things such as line, page or paragraph numbers, but the possibility of a description instead is acknowledged.

The discussion of the means of identifying the concept or item is less satisfactory. Elsewhere in the identifier is referred to as a *heading*, but it is not clearly described or defined, and its relationship to the concept is not further analysed. It is said that "terms chosen as headings should be taken directly or derived from the collection", but this does not attack the root of the problem. As in Coates, certain basic things are simply assumed to be natural and obvious.

Finally, the index entries are arranged in some known or stated order, such as alphabetical, chronological, numerical, hierarchical or "arbitrarily systematic". This is a broader approach than that of Coates, and it draws upon an assumption which is implicit in Coates, that the order to be acceptable must be *searchable*. Hence, a random order would be valid if it was searchable, by manual or mechanical means. Searchability is obviously a relative term anyway, whatever the order.

My third set of definitions arises from an attempt of the Aslib Coordinate (i.e. Post-Coordinate) Indexing Group to put its own house in order and develop a standard terminology for its subject. J.L. Jolley writes of it not only as an attempt at rationalization, but also as an outline for a wider, unified language. His definition sequence is long, and systematically built up, and I will try not to lose too much of its subtlety by quoting extracts. The definition sequence is printed in full in the March 1976 issue of *Aslib proceedings*, but draws heavily on earlier writings by Jolley and others.

The first step is an *item*, which is any thing, event, material or process which is the subject of an information handling system. This is a much broader idea than document or collection. A *feature* is any attribute of an item. A *subject feature* describes what an item deals with. A *data unit* is an item related to a feature.

A *list* is any sequence of items or features. Then, an *index* is an arrangement in which lists of features are supplied, each feature being followed by a note of the items which possess it. A *classification*, by contrast, is a hierarchy of features, and it provides a storage order for the items to which the features are applied. A classification is thus a special kind of index, and so is a coordinate index. It is interesting to note that the Group is not completely convinced that hierarchies are necessary for classification. But if they are not, what is, and what is left of the definition?

What have we learnt by looking at these three sets of definitions? We have acquired a lot of different terminology, with not much overlap or agreement. What is particularly confusing is that there is not always a simple 1 to 1 correspondence in the definitions. True we have
subject catalogue = index = index
documents = collection = items
subject heading = heading = subject feature
subject entry = index entry = data unit.

None of this suggests a sound basis for an attempt to define the unity, and to describe the diversity of indexes. What we need, and still do not have, is a meta-language to discuss indexing, one removed from any particular system or approach. And as soon as we recognize this we realize that there are other workers in other fields with whom we need to converse - logicians, linguists, mathematicians, computer scientists, etc. - who have their own terminologies which overlap with our own.

This leads to the third level of indexing theory, the conceptual; least satisfactorily examined of all. The equivalences given above were all on the surface characteristics of indexes. The situation at the fundamental level is much more confusing.

For Coates, a subject heading is a statement of the subject of a document. Subject cataloguing is essentially summarization, and subject headings are condensed abstracts. This is the approach which I have normally accepted, and I probably, but unconsciously, took the idea from Coates. I am painfully aware of the objections to this idea which have been raised by Patrick Wilson, who among other things says that it conceals a distinction between discerning the central thesis of a work, and attempting to discover one thing which the writing is about. The process by which one can move from document to abstract is also very unclear.

For ANSI, a heading "identifies" concepts. Concept and subjects are not equivalent. Nor are statement and identification although they could both be considered as "labels" of some kind.

In Jolley, there are many more steps in the description. A subject feature is an attribute of an item, and it describes what an item deals with. Our mental pictures of an attribute, entity, operation or condition of real life or of the imagination are called *notions*, which are given names in the form of words. These words could be replaced by symbols, as in a classification scheme, but it is the words which describe.

Thus the relations of notions and features are more precise and more fundamental than that implied in Coates or ANSI. It is in the nature of words themselves that they are labels, and it is not a special characteristic of their use as features in indexing. And words have a life independent of indexes. They relate to thought and to thought processes, and they inhabit theoretical structures independently of their use as features. Classification symbols are simply labels, and do none of these things. But while indexes use words, indexing must be seen in the context of many other disciplines besides ours.

Obviously, at this level of indexing theory, there is little agreement, little unity, and even less of a common language with which to communicate. Is it even possible that indexers can solve these problems, in isolation from other fields? If we do not understand concepts, or notions, or ideas, and their relationship to the names with which we describe, identify, or state them, then neither do philosophers, linguists and psychologists. It may not even be wise to draw for our rationale on these other fields, for they are as fluid, and as changable as our own. In the final analysis there are few facts as such, only many structures which are constantly being repaired, re-built and vacated.

It is appropriate that our actions should be reducable to such fundamental questions and studies. Were it not so our work would be much less relevant to the world. I have no final answers. There may not be any. I am not even sure that there is a unity. But if we learn to talk to each other, to listen and to exchange ideas, and to develop a common meta-language in the less fundamental areas, we may be able to achieve something.

Catalogues, indexes, thesauri: the continuum, "a continuous series of elements passing into each other", is there for us to exploit.

AUSTRALIAN SOCIETY OF INDEXERS

1st Annual Report

This will of necessity be a short report as our Society has only been in existence for a short time.

After Mr. Godfrey Green's resignation as Corresponding member in Australia of the Society of Indexers, in September, 1975, a questionnaire was sent to members to ascertain their views as to the future of the Society.

A special meeting was held on 12th November, 1975, to discuss these views. At this meeting an interim committee was formed to prepare an agenda for a General meeting at which the recommendation would be put forward that an independent Society be formed. This meeting took place on 27th April, 1976 at CSIRO, in East Melbourne, and twenty two members were present. Resolutions were passed whereby the Society of Indexers in Australia was dissolved and the Australian Society of Indexers was formed. A draft Constitution was discussed and adopted and an Executive Committee was elected.

The Committee has since held three meetings to discuss procedures and future programmes. On 21st July, the first general meeting was held at CSIRO East Melbourne, with twenty one members present. The guest speaker was Mr. John McKinlay, Cataloguer at La Trobe University Library, who gave a most interesting paper which provoked lively discussion and gave the Society a fine start. A Newsletter has been compiled and sent to members and institutional bodies who had displayed interest.

The Society of Indexers in London and the American Society of Indexers have each been approached with a view to establishing a relationship between our respective Societies.

It is planned to establish a Register of Indexers and a Committee has been appointed to examine specimen indexes from members wishing to be placed on the Register. The Society is also investigating the possibility of compiling an index to indexes.

The membership is still rather small which is rather disappointing, especially in view of the large number of people who were sent all the information about the new Society; however we are hopeful that with the interesting and varied programme planned for the future more people will be attracted to our Society and we are confident that they will benefit from membership.

ON THE SEARCH FOR THE HOLY GRAIL - AN INDEX TO INFORMATION

Ed Lewis

1 Psychological Research Unit

Situation

Librarians and information scientists have been awoken by nightmares of drowning in the *flood* of information generated by the sorcerers' apprentices. Little gnomes of science and trolls of technology have published mountains of learned papers and tables of statistics. Rumpelstiltskins in Information Analysis Centres have to teach their fair maidens and callow youths slaving in libraries owned by ogres how to change this dross into strands of gold.

How? Catalogues and thesaurii, data-bases and SDI, seraphim and cherubim, have been summoned to the task. Information has been collected, collated, stored, retrieved, weighted and evaluated in thousands of centres throughout the world. Mystical spells have been spun by wizards and warlocks, stirring their cauldrons of alphabet soup and droning incantations of "ANSTEL, INSPEC, NTIS, and ADSATIS".

Empirical data and theoretical ideas, embedded in journals and lost in reports, have been sorted and stacked. However, to the world of users *out there* the princess still sleeps. Information, carefully arranged, remains dormant - because no one charming enough knows how to get their damned hands on it!

We have proliferations of libraries, millions of cards (even some MARCed), well constructed data-bases full of knowledge about published works, union lists, cartographic registers, membership lists, newspaper indexes, abstracting services, citation sources, bibliographies and even bibliographies of bibliographies. The lot can be useless if it takes too long for the bloke wot counts - the searcher for the Holy Grail - to find what is needed. If it takes too long he will proceed without the knowledge that would have prevented him from re-inventing the wheel.

There are attempts to gather together all the collations of raw data, all the primary and the secondary condensations of information. Examples of initial steps hesitant and complex, include the resource-sharing network forming under the National Library's aegis and the interface between data-bases formed by CSIRO's selective dissemination of information service. Unfortunately, some potential users take too long to learn about the labyrinths of the National Library, much less the crystal towers of CSIRO. If sources are not used they are useless.

The need for the coordination and the education of user enquiries is well established. However, staff or financial restrictions, and misdirected enthusiasms or apathy, have restricted the availability of information to the user and prevented his awareness, of how he *can* keep track of the welling springs of data. We all know gold is in them there hills, but how *does* the bewildered prospector dig for it?

This situation was raised by a *cri de coeur* from an iggor'nt user at a recent meeting of the Australian Society of Indexers. The plea was for an Inex to Information: some way that could lead users to the facts that they need, regardless of where they started their quest and their innocence. The meeting decided to set up a Committee of One to solve the problem of forming such an Index. This report outlines the intent of this Committee and it seeks your advice about the ideas and proposals introduced below.

Mission

The Committee must determine:

1. What do users need.
2. What has been done to meet this need.
3. How can any gap be closed without
 - a. duplicating other efforts and
 - b. becoming bogged in a Bottomless Pit.

Factors

There are a number of factors that govern the selection of the approach the Committee must take. The constraints acting upon the Committee include:

1. lack of money,
2. lack of staff, and,
3. lack of time.

The Index must have the benefits of being:

1. accurate,
2. up to date,
3. comprehensive, and
4. freely available for little cost in users' time, staff, or money.

The problem is complex. Its scope is broad and its detail is fine. It is certain that the bleached bones of other travellers lie off the path through the Pit; but somewhere out there hides the solution, all we have to do is find it.

Courses

There are many ways by which this solution can be approached. There may be several equally attractive solutions. Some paths are outlined here. Your ideas and comments would be appreciated. Once your information has been assimilated, then a systematic generation of possible solutions, and their subsequent evaluation, can start.

Interviews and questionnaires can be used to find out the needs of the users. Suppliers of information can be questioned at the same time, about what they see as the needs and about what they have available to meet these needs. Such enquiries will take time, organizations will have to be approached for help. You may be asked to help - can you?

The list of solutions is constrained only by your imagination and knowledge. Some probes and jogs for ideas include:

1. The construction of one large (!) composite encyclopedia of sources of information maintained by
 - a. the National Library or
 - b. some private enterprise organization if the National Library is ham-strung.
2. List of sources that are specific to subjects or disciplines, maintained by special libraries, but accessed through a common enquiry centre.
3. A network of gate-keepers (experts in specialized fields responsible for their own indexes) aware only of each others existence, with or without a central enquiry centre, perhaps with a register of expertise.

These possibilities may, or may not, be dependent on EDP support. They may be developed and maintained by one Government or commercial organization or by a loose-knit confederation of individuals. They may be funded by general revenue or by search fees. These solutions may have to be created or they may already exist in adequate forms. WHAT DO YOU THINK? The expertise of the Committee is limited. Please tell him to suck eggs if necessary, rather redundancy in your feedback than let the Committee blunder on in ignorance.

Plan

At the moment it is intended to construct a questionnaire that can be used to find users' needs. An Index of what is currently available may be based upon the form shown below. Your comments on the content of this form would be appreciated.

INDEX TO INFORMATION FORM
(examples given in parenthesis)

Who: Agency responsible for maintaining information

Organization/source title:

Contact address:

Name of contact person

Address

Phone

Availability (hours of work, number of staff)

Function (library, IAC)

Scope: (geographical spread, market/interest areas)

Objectives: (type of organization: research, policy, production)

Links with other agencies:

Users of facilities: (general users, register of casual enquires)

What: Content of information

General description:

Subjects covered: (using UDC/Bliss/COSATI classification)

a. most relevant

b. related

Sources covered: (journals, in-house reports, notebooks, minutes, TOMB)

How stored: (hard copy, microfiche, data-base)

How summarized: (full, abstract, key-words)

How classified: (UDC, COSATI, in-house)

How indexed: (card catalogues, EDP)

Languages used:

a. input

b. storage

Translation available:

How: Method of retrieving information

Access restrictions: (confidentially, method of security)

Contact procedures: (request forms, on-line, batch)

Input detail required: (key words, weighted terms, general enquiry)

Available output: (hard copy, photocopy, summary, specific data)

Timings for each type of output:

Costs for each type of output:

Services: (IAC, SDI, current awareness, retrospective, referral)

Interface with other systems: (common SDI enquiry systems, in OCLA, in MARC, in Union Lists)

Future:

Intended enhancements

Intended innovations

Overleaf is a list of questions which may help you to formulate your ideas about this project and us to develop an effective programme to take the job forward.

We know the difficulties. What we need from you are the answers to these questions:

1. What are your comment about the situation described here?
2. Do you think the mission given to this Committee is:
 - a. worthwhile
 - b. feasible?
3. What other factors should be considered?
4. What courses of action are there for:
 - a. finding users' needs,
 - b. finding what is available, and
 - c. overcoming any inadequacies?
5. What should be included in questionnaires about users' needs?
6. What are your comments about the form for indexing what is available?
7. Would you be willing to be responsible for collating such forms for your area of concern?
8. What help can you give?

Your knowledge is needed. Your input, one day, may be multiplied into an efficient system that will allow you to sleep at nights, with the flood of information nicely dammed and irrigating the fields of the workers below.

Please help your lost and lonely Committee. He is

Captain Doctor Ed Lewis
1 Psychological Research Unit
485 Bourke Street
MELBOURNE VIC 3000.

Phone: 600261 Ext. 217

Extract from a letter from Associate Professor Bryan Gandevia (Thoracic Medicine) Department of Medicine of the Prince Henry Hospital, Sydney, to Mrs. Jean Uhl:

"I was delighted to see somewhere else that the Society of Indexers was in business - I feel I owe the indexers of many kinds of material an immense debt, and I hope they flourish exceedingly. The problem, as you have appreciated, is to index the material in ways which will be meaningful to research workers with different basic interests."

Professor Gandevia is the editor-compiler of *An annotated bibliography of the history of medicine in Australia*, 1957. (Part 2 is in course of preparation).
