In addressing the Society of Indexers on the Telephone Directory, I feel that I am among experts. I have no claim to be an authority on indexing, but I have a claim to some knowledge of telephone directories.

In this sphere my task is, in some respects, not so difficult as that of my colleagues in certain other administrations. Fortunately for us, the Telephone Directory is in English! When I was showing round colleagues from Spain and Iran, I discovered that in the Persian directory most of the subscribers are called Mohammed or Ali; while in Spain there seems to be no such thing as a single surname, and the repetition of Sancho and Fernandez, with "y" and "O" and "de' in between surnames must make their task a difficult one.

I propose to divide my talk into three parts: (1) general background; (2) compilation; (3) alphabetical order.

General background

The telephone directories of this country are, of course, a colossal task by any measurement. Twelve million books a year are involved, nearly all from one Press. It is the biggest single book-production job in Europe, and entails tremendous technical problems.

The Press, which is at Harrow, is very modern. It has seven large rotaries and a number of smaller ones, and can produce over 10,000 pages per minute per machine. The cost is something like a million pounds a year.

Why do we have telephone directories? The Department is developing at great speed on the technical side. Why not let subscribers phone up Directory Enquiries, and not bother with directories at all? Well, our estimate is that some one thousand million references are made to the Directory in a year for telephone numbers. Directories are not provided to give people's addresses, but at least twice as many references are made to the book for addresses, initials and so on. We could not cope by any other means.

This task is the second largest of its kind in the world, but America's is nearly ten times as large as ours. The Americans, about ten years ago, thought that perhaps the time had come to do away with directories. But a public opinion survey revealed that their subscribers would be extremely aggrieved, so woe betide any Administration which tried to take them away!

The directories of this country—twelve million a year—expand by 50 per cent every ten years, and go out to 50 per cent more people. That is the problem of the future. At the moment the shortage of compositors is so great that I shudder when anyone mentions 1970!

As for the London Directory—"the best-read book in London"—over five million have to be delivered to subscribers.

* Based on a paper read to the Society in November, 1961.
Compilation

Coming to the compilation of the book, perhaps I ought to touch on the question of who is in the book and who is not. It is our aim to have everyone in the book, and omissions from it cause us a lot of trouble on the operational side. There are, of course, well-known people who ask for ex-directory treatment—though relatively the number is small. There are lines which want outgoing calls only. At the time of the Lewisham train disaster the staff of the local hospital found that, owing to the publication of their numbers, they could not get through to other medical services because of enquiries flowing in from patients' relatives. But there are some very important persons, including the Queen, the Prime Minister and the Postmaster General, whose numbers are in the Telephone Directory and they do not seem to have much trouble about it. But members of the public are entitled to be excluded if they wish.

The compilation of the Directory is carried through in what may seem an almost archaic way. Generally speaking, throughout the country we have one clerk in each of fifty-six areas, and she picks up last year's directory and in her own fair hand puts the amendments down. For a technically-minded institution like the Post Office, this may seem too old-fashioned for words; especially as amendments can amount to a third of the total number of entries. But we have looked at teletype setting; we have looked at punched card methods; and up to now our old method has proved not only the cheapest but the best. One proof is the low incidence of error. Just leave a person out of the Directory who wants to be in, or make a mistake in the spelling of his name, and you hear about it!

But this last year, new revolutionary processes have arrived which will lend themselves, we think, to a new method of compilation. It is the development of a system in use in Holland for the printing of their directories, and which may well be adaptable to our requirements.

We visualise something like a card index, with every telephone subscriber's name. These cards would be prepared on typewriters and processed through a camera, using a device which would line them up and photograph them, the photograph becoming a plate.

In London we have departed from the MS. method, using Flexoprint (another card camera system). But, because of the vast number of Directory Enquiries, we have to have special directories, in effect reprinted daily, so that each operator has up-to-date information. We issue supplements, daily, weekly, monthly, and use these supplements for the compilation of the new Directory. We did this job in London because of the need for speedy additions of new subscribers, whose names and telephone numbers require to be put in print almost the same day.

Further developments are coming along. If you can get efficient machinery it must be more accurate than the human being. If you build the alphabetical order into a computer it must be perfectly accurate.

Alphabetical order

The Directory is one vast index. Probably our problems are much simpler than in the indexing of books. But we have special and perhaps unique problems. The Directory has one purpose—to enable a person to find a telephone number
as quickly as possible. Soon after I became responsible for Directories I had my first big problem and I found myself out of my depth. So I phoned up the British Museum and put my query to a librarian there. I told him that I had some problems on alphabetical order: were there any books? He gave me a number to phone, which was the one I was speaking from—so I did not get very far!

The Telephone Directories have been built up almost on an empirical basis for almost half-a-century. The basic objective throughout has been to get the Directory in strict alphabetical order. We have tried departing from it for very good reasons, but as time has gone on we have stiffened in the attitude towards strict alphabetical order, because any departure has been apt to lead us astray.

However, when one has to list several numbers for a business firm, it is very desirable that the most important number should come first; so we have "Enquiries" or "Headquarters". Or even with the tycoon rich enough to have the telephone in his car: this requires a number in the Directory, so that one has very often first the important number, say the office of the person concerned; then the residence; then his car. I think it would be fatal if we were to keep to strict order in cases like these, as there is always a tendency to try the first number in the book, and business men spend more time in their offices and homes than in their cars.

Then there are some special problems on the listing of names: e.g.—

Hills
Hill's
Hills'

We have discovered from experience that the best way is to group the Hill's after Hill but to ignore the apostrophe in the case of the plural possessive.

There are also different ways of printing certain compound words, e.g.—

West End
West-End
Westend

There is a great demand from the public for us to put all such name-phrases together. This, of course, looks sensible from the point of view of the caller. He wants, say, the West End Stores. Therefore, it seems reasonable to put all three methods of spelling in one block, as the caller may not be aware of exactly how the firm prints its name. But when one comes to the words normally in between there is a difficulty. However, we do ignore the hyphen so that West End and West-End come together.

If we decide to depart from the established order of names we are faced with a great difficulty. It means redirecting 60,000 operators, and, even worse, re-educating the whole country in that particular. For fifty years we have put the names one way, and, if we are going to change, it is a colossal task to educate everybody.

It is always possible to consult Directory Enquiries—when you are looking up the man called Smith, for instance, and don't know his initials or address. So if an arrangement seems old-fashioned, or even wrongheaded, I think you will agree that, unless the balance is heavily on the side of change, it would be foolish to depart from the established custom.
When consulting the Directory, spelling may constitute a difficulty. This is especially so with names such as Read, Reade, Reed, Reid; Thompson, Thomson, Tompson; Whitefield, Whitfield, etc. It is a problem to ensure that the Directory user can find a name quickly. Often he is not certain how the name is spelt. We do one of two things. With the “Macs”, we put them all together, and make an announcement on various pages that we do this.

Where this would not be the right method, we warn people at the head of the name place to see also the alternative spellings. We cannot go in much for repetition, because we have to get this work of reference into the smallest possible space. Therefore we go in a lot for cross-references. But people get fed-up with cross-references, and we find that, after two, which brings them to the third place, they tend to give up and make a telephone call, which is free, to “Directory Enquiries”.

Then we have a problem of classification. Ideally, we should like each entry under its name. But is this the place where you look for it? For instance we are currently considering the question of public libraries controlled by the local authorities, which pay their bills. However, the library may have a name—say, St. John’s Library. Where does a caller look—under “Libraries”, “Kent County Council”, or “St. John’s Library”? One would like to cater for everyone and put libraries under all possible heads but this would take up too much space. So we will perhaps have a cross-reference in one or more places, and put the entry where the ordinary person is most likely to look.

We did this recently with the Courts. Courts were scattered throughout the book:

County Courts
Magistrates’ Courts
Metropolitan Courts
Royal Courts of Justice . . . and so on.

After top-level discussions, in which the Lord Chancellor himself was involved, it was decided to try putting them all under “Courts”, with cross-references in other places.

There are cases where one individual person’s name may present a difficulty. The well-known personality Victor Silvester spells his name with an “i”. But he says people will look him up under “Sylvester”. Instead of a cross-reference, it occupies no more space to put him in under both spellings.

I hope I have not given you the impression that we are complacent. We are rather tempted to be! So many people go to the Directory for guidance as to the correct alphabetical sequence, and most parts of the world follow our standard. In one or two Commonwealth countries they go so far as to publish our internal rules in their directories. But we are conscious of the fact that this is not a subject on which you can stand still, and one of the major problems is to instruct the public in the correct sequence. Perhaps we might put a coloured inset into the Directory to show how we arrange names.

There is a different approach which we are studying with a view to overcoming some of the problems which I have mentioned, and especially the common
surname. There is a possibility of smaller directories, covering smaller areas; and it may be that we could concoct some completely new system.

It might be that it would suit a telephone subscriber better to have the Classified Directory, and with it just a small Directory, covering his immediate neighbourhood. We just do not know what people's telephone habits are, except perhaps that they vary enormously from one person to another. At the same time, with the growth of dialling people will be able to dial Trunk numbers, and therefore may need bigger directories! But in one way or another we hope still to make progress in helping our subscribers in some friendly and not too technical manner.

Mr. Dick made the following points in answer to questions:

Commas. The omission of commas between such names as Roberts Ellis & Co. was a deliberate policy, in order to reduce the physical size of the book. This was done in common with their American colleagues, and it had been found possible to reduce bulk by 7 per cent merely by omitting certain punctuation features. This reduction in size represented a saving of some £60,000 per year. It also made it possible to keep more entries within one line, which was easier for the user. However, if a business subscriber specifically asked for commas between names in his trading title these would generally be allowed.

Customer's requirements. If a customer required his name or that of his firm to appear in a certain form, the Department was morally, although not legally, obliged to do as he wished. If, as a consequence, there were a lot of Directory Enquiries, they might return to the attack. If the position in the Directory was involved, they might insist on its appearing in a certain place, or they might agree to put it in two places.

Internal Rules. Regarding the extent to which the Department's internal rules were available to the public, they had been published in The Indexer (Vol. 2, Autumn, 1961, pp. 142-3).

Strict alphabetical order. He agreed in principle with this ideal, which was one they adhered to as closely as possible. But if they did this they must assume that people knew precisely the spelling of the name they were looking up. Unfortunately this was just not so, and therefore they had to admit a certain amount of apparent inconsistency.

Staff: Low incidence of error. The staff engaged on directories was perhaps surprisingly small. At headquarters, only half of Mr. Dick's duties were concerned with directories but he had one assistant entirely devoted to this subject. In the areas, one clerk, generally speaking, per area. In Manchester or Birmingham, perhaps two or three, with possibly some additional assistance when the book was going to press. There was therefore a total of about sixty clerks working under supervision in the provinces. Their senior officers would give part of their time to considering difficult questions. If a Telephone Manager wanted a new local Directory, they might allow him to make arrangements with a local printer. In London there was a staff of about thirty working permanently, with supplementary help.
In regard to printing, the Press at Harrow was specially designed for the job, with a staff of over 1,000 at the works.

In regard to errors, the Department was proud of its standards of accuracy. They did make mistakes, occasionally serious ones, but a serious mistake occurred only perhaps once in three years. Omissions sometimes occurred. It was better to leave a name in the book than to take it out, if there were any doubt about the matter.

Classified Directory. An experiment was to be made next year at Reading. Instead of sending only the alphabetical Telephone Directory to private subscribers, they were going to bind-in the Classified Directory. This would reveal whether when people got additional information in classified form it reduced the number of telephone calls to "Directory Enquiries".

ARRANGEMENT OF ENTRIES IN LONDON TELEPHONE DIRECTORIES

Comments based on the outline rules published in The Indexer, Autumn, 1961, pp. 142-3, and on the talk by Mr. R. P. Dick to the Society of Indexers, 9th November, 1961, and discussion [published above].

One finds oneself in cordial agreement with most of the rules enunciated, including one or two which, though unusual, one regards as justified, e.g., the ignoring of "&" (clause 4). The following are small exceptions, but the comments admittedly have a librarian's bias and are subject to modification in the light of the practical considerations put forward.

What may be called the "treatment of spaces" question occurs in two places and with apparent inconsistency. Clause 3, "A.B." before "Aagar": this is the word-by-word or "nothing before something" system; but clause 6, last sentence, "Allport" followed by "All Saints": this is the letter-by-letter or ignoring-spaces system. Whether the two can practically be harmonised is a question. As to the merits of the two systems, the present writer prefers the "letter-by-letter" (used in the O.E.D. and Encyc. Brit.), but the Secretary of the Society apparently prefers the other, which may be better for this particular purpose.

Clause 5, first sentence, singular possessive following simple name: agreed; but cf. last sentence, in plural possessive apostrophe is ignored: is there a reason for the apparent inconsistency? Presumably either the plural possessive should follow the same principle as the singular—following the singular possessive, say, thus—

<table>
<thead>
<tr>
<th>Hill</th>
<th>Hill's</th>
<th>Hills'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

or the singular form should have also its apostrophe ignored, thus—

<table>
<thead>
<tr>
<th>Hills A</th>
<th>Hills' B</th>
<th>Hills C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hill's D.</th>
<th>Hills E</th>
</tr>
</thead>
</table>
Clause 6, first sentence, compound (hyphenated) names follow singular possessives: this will depend, as concerning the latter, on clause 5 (preceding note), and as touching the former on the "treatment of spaces" (ante). Second sentence, "south-east", etc.: same latter remark applies.

In the outline published nothing seems said about arranging inverted forenames (originally following commas), e.g., Allan, Octavia, in one sequence with straight sub-divisions, e.g., Allan of . . . ; these differ in meaning, but perhaps here there is practical force in their interspersion.

Clause 8, titles: suggest putting after clause 9.

H. V. Molesworth Roberts.

Comments by R. P. Dick

1. Basically the Post Office follows strict alphabetical order, grouping together all names commencing with the same word. We prefer—

   West Alfred
   West Robert
   Western

   to

   West Alfred
   Western
   West Robert

   Indeed this former method is essential for a book like a telephone directory.

2. There are some exceptions. We have found from experience that people look for All Saints in the allsaints position.

3. The question of the singular and plural possessives is a difficult one. We have considered changing to the method suggested, which would certainly be more logical. However, there is no evidence that the directory user would find it easier and there would have to be a clear advantage to outweigh the considerable expense and confusion which would be caused during the period of transition.

OUR CONTRIBUTORS

Mr. Christopher Kent, B.A., is Assistant Editor of the Encyclopaedia Britannica Ltd., London, and recounts in the following pages the fascinating story of the compilation of its index, which is done in America.

Mr. Robin Phillips, B.A., is a recently-elected member of the Society, and has devised an interesting method of recording the information available in family trees. His article on page 25 will be of particular interest to genealogists.

Proof-reading is the concern of indexers in the final stages of their work, and Mr. G. Norman Knight, M.A., our Hon. General Secretary, supplies useful hints to newcomers in his article on page 31.