The Revision of Encyclopedias

The editor of the "Encyclopaedia Britannica," gave the Reference Librarians Sub-section of the A.C.R.L., at the Chicago midwinter conference, an inside view of the herculean task involved in revising an encyclopedia.

Mr. Pliny, that most ancient of encyclopedists, who is said to have prepared the first encyclopedia known, never, I think, revised his monumental work. If, however, he had decided upon another edition there is no doubt that his second issue would have carried the number two. It has so long been the custom to call editions by numbers. I do not know exactly why—but the term has come to connote in most books a partial change and in encyclopedias a complete overhauling of contents. Among encyclopedias, new editions appeared in the eighteenth and nineteenth centuries at intervals of from ten years to a quarter of a century. Usually enough copies were printed in the first publication by subscription to last for a decade or more and a new edition appeared only when the first edition was exhausted. No one apparently considered the advisability or indeed the need of revision between printings, if there were any printings between editions. The ninth edition of the Encyclopaedia Britannica was sold for longer than a quarter of a century without any revisions between printings. (I must except, of course, the changes which were made in the five or more pirated editions of the ninth edition sold in this country.)

The eleventh edition of Encyclopaedia Britannica was sold just short of a quarter of a century without changing the plates in any respect. It was commonly understood that it is not the office of any encyclopedia to be up to date as a year-book is. It often takes five years or a decade to know how properly to report a series of events, so that the information can be significant, conclusive, encyclopedic. Events usually cannot be conclusively reported immediately after they happen and users of encyclopedias generally realized that.

Sometimes when a new numbered edition was needed, the publisher issued not a completely revised edition, but what have been called supplementary volumes. This meant that the plates of the original set of books were not changed in any respect but that additional volumes were added to the set to bring some of the material to date. And the entire edition, old plates and new plates, was given a new edition number. This arrangement was not so satisfactory as the appearance of an entirely new edition for obvious reasons: a supplementary set of books actually reduced the physical value of the original set; it also meant that the user of an edition with supplementary volumes had in reality to refer to two sets of books in order to discover the information he wished; he also had to use two indexes to cover both the old and the new sections of the work.
Chief Difficulty

There were other difficulties encountered by the publisher because of the traditional plan of issuing numbered editions, or supplementary volumes, but the greatest difficulty lay in the organization of the publishing house itself. In the past, it took from two to five years to prepare supplementary volumes. During this period of preparation the information would get out that a new edition was in process and persons hesitated to buy the set of books already in existence. What actually happened was that during the preparation of the new edition the publishing house became an editorial department entirely—the selling organization did no business at all. No one would buy the sets on hand which represented great money value to the publisher, in anticipation of the opportunity to purchase a new edition soon. This meant, of course, that money was going out and none was coming in. Editorial and printing expenses ran high and the house enjoyed no income to pay for them.

The financial history of such publishing houses with large encyclopedias might be represented by a cycle; half of which runs to a fair degree of prosperity because money is coming in, half to a period of outlay only. The business in the past has risen and fallen and the rising and falling has been sharp—with the result that every new edition of an encyclopedia has sometime or other suffered the threat of financial collapse.

With the beginning of the twentieth century and under the stimulation of subscription book selling, subscribers to encyclopedias began to feel the need of up-to-dateness. They began to believe that an encyclopedia which did not carry the very latest of current events was in a sense a fraud, an attempt to "get away with something." The book salesman himself had a great deal to do with this change in attitude. The latest printing date for copyright in the book might be the current year. The salesman would insist, and I am afraid he still often does, that this date indicated how recent was all of the material in the set. He would sell an encyclopedia (and what is worse the subscriber expected to be sold on that score) much as he might a yearbook which can very easily be changed throughout with each year's printing.

A Physical Impossibility

The salesman, and often, unfortunately, the subscriber, cannot clearly understand that it would be a physical impossibility to make a complete revision of a great encyclopedia each printing year. Working at the greatest speed with the greatest number of helpers, copy for a complete revision of an encyclopedia of millions of words could not be secured, styled and prepared for the printer in twelve months. The editorial work done, it would then be necessary to take at least five to six months for the setting of type, the proof-reading, the printing, and the binding. The 1940 set, copyrighted 1940, of a great encyclopedia, completely revised, would be fortunate in having material in it as recent as two years before the date of publication. You understand that I speak in general terms. As a matter of fact, certain items of most recent occurrence might very well be added even during the period the revised encyclopedia is on the presses, but such recent material would be of a very small quantity. And such minimum up-to-date insertions can be of value only to the unscrupulous salesman.
It is, I believe, a most unfortunate development in the distribution of encyclopedias that the question of constant timeliness should enter so much into the sale and purchase. Not many pocketbooks could meet the cost of the thorough annual revision sometimes suggested by salesmen and expected by purchasers even if it were physically possible to make one.

Continuous Revision

It would seem to be understood why the modern tendency is toward continuous revision and against new numbered editions. In the first place the publishing organization remains intact during the annual partial revisions for yearly printings. The sales are made with no disastrous effect of a new edition outmoding the remaining copies of the current set. Each year’s partial revision is paid for by the current sale.

With this plan of continuous revision the set is in a state of flux. The extent of each revision for each separate printing may be great or it may be small. Whether it be great or small depends upon the character of the publishing house, and by that I mean, whether the publisher is deeply concerned about keeping his product in value all of the time; it also depends on the amount of selling that is done. If few sets are sold during the year it is impossible for the publisher to make many expensive revisions for the next printing. Of course, ideally, the publisher, if a sufficient number of books were sold, should be able to revise fairly extensively each year, provided his original capital investment had been paid off. The percentage cost for revision, set up in the selling price, is an important item in the ideal situation. With the capital investment paid, the entire amortization percentage can be and should be devoted toward the problem of keeping the volumes in value.

In substance the Britannica’s method, I think, is carried out by all reputable publishing houses, the extent to which it is carried out depending upon the amount of money available for the editorial work. When the eleventh edition was prepared, the original pages of the old ninth with the supplementary volumes of the tenth were cut up, pasted down on sheets of paper and each subject sent to a known authority in the field for revision. A group of contributing editors advised the editor as to necessary new inclusions—new entries to cover interests which had developed in the interval from the date of the ninth edition to that of the eleventh. The authors were asked to read over the old material and revise it to date. In some instances quantities of the old material were salvaged or slightly modified and new material added. The same method was used in the preparation of the fourteenth edition: the old eleventh with the supplementary volumes of the twelfth and thirteenth were cut up, pasted down, and the articles sent to the proper authorities for revision. The very same method is used in continuous revision. First of all, all of the entries in the encyclopedia are divided into general classes of subjects. There are in all thirty rough divisions into which the 40,000 articles of the present edition of the Britannica are divided. This classification of entries occupies a card file, half of which is devoted to a classified carding, half to an alphabetical listing and each card bears the history of the article to which it refers. As I have said, the classification is a rough one. Physics, chemistry, and the industries overlap considerably for obvious reasons, but the aim of the editor is to classify for authorship, so that related
articles, whatever the classification, may be handled the same year. I am reminded that in our experience some of the classification was too rough. The young woman, for example, who classified under geology the subject “gall-stones” is no longer with us, nor the one who classified “Job” under occupations.

The thirty classifications are scheduled for revision over a ten-year period in such a manner that each classification is overhauled at least twice during that time. Living men and the current history of countries are reviewed each year; population figures every fifth and tenth year and so on. It might seem necessary to revise all statistics annually. Ideally they should be revised annually, but there are statistics in so many classifications that it would be physically impossible to make anything like so extensive a revision.

Per cent of Material Revisable

Scheduling the classifications over a period of ten years does not, of course, mean that we expect each article in the classification to be revised. As a matter of fact, a hundred or more years of experience have indicated that less than 20 per cent of the material in an encyclopedia is revisable. Approximately 80 per cent is “frozen.” It is true that great political, economic, and industrial changes may bring about a change in point of view toward the examination of history, or a new discovery change the approach to the various sciences. When such changes of points of view are apparent, then of course, some of this 80 per cent of so-called unrevisable material requires scrutiny. But that does not often occur. When I say 20 per cent of the material in the encyclopedia is revisable, unfortunately I do not mean that 20 per cent of the pages in the encyclopedia are revisable. The percentage of page space is higher—much higher. An article itself may be three and a half pages long but it may touch five pages in the volumes and this necessitates a handling of five pages when the article of three-page length is revised.

As a result, in any revision, there are these points an editor must consider: the length of the article itself in pages and the number of pages involved in the mechanical change. He should know the first because he must determine the pay he will give the author; he should know the second because he must keep the mechanical changes necessary for the revision within the limits of the editorial budget for the year.

Suppose, for example, we have scheduled for revision this year the following groups: industry, engineering, living biography, and current history, which we included under the classification, geography. Our card index gives the name and location of each of the articles in these classifications in the encyclopedia. Tear sheets are secured from the printer and the text of each entry is pasted on a large white sheet of paper. If there is a contributing editor in charge of the classification “industry,” he is given an opportunity to decide which of the articles in this classification requires revision and to decide the name of the new author, if the original author is not available, to make the revision. The paste-ups, including whatever pictures go with the article, are then sent to the author. He is instructed to revise the material to date, to keep within the same space if possible, and to salvage as much of the original copy as possible. He is asked to examine the pictures for timeliness. If it seems to him that an adequate report on his subject has expanded out of all proportion to the space originally allotted to it, he com-
municates with the editor and a new space arrangement is decided upon.

Fitting Copy

Since we are working on plates of metal you can understand that problems of fitting immediately arise. Although we have wished frequently that type might be made of rubber, adjustments can usually be made successfully, even in metal. This year, for example, the article on wire was completely rewritten. The new article is thirty-nine lines shorter than the space occupied by the old. The author did not believe the article could be expanded. In order to make up the additional lineage an article on William Wirt was added to the pages—an important figure in early American history. He should have been in the books long ago. Or, take another instance, the original article in the fourteenth edition on petroleum occupied perhaps as much space as it should have in 1929, the date of the original printing of the edition, but today it is out of proportion to the material, for example, on coal. Consequently, I asked Dr. Fanning to write sixteen new pages in addition to the amount of material occupied by the original article on petroleum. These will occupy A and B pages added to the book. (And forever after, because we have placed A and B pages in the book, the manufacturing cost will be increased each year.)

In some instances it is necessary to reduce certain articles in order that another expanded article can be made to fit. This type of adjustment is made only when the material does not extend beyond one page; that is to say, when the adjustments can be localized. If the author cannot expand his article or reduce it, then the expansion or reduction is made in another article on the page. I may say that this reduction is never done without careful consideration. If an article will not be weakened by necessary excision, the excision is made. Librarians are sometimes troubled by this method, which, as a matter of fact, is not used excessively; but whether it is used often or not, it seems to some to be a rather highhanded treatment of original copy. I have no such reverence for original copy. I have had twenty-six years of experience in the handling of copy and in the writing of it. I have never seen an article the worse for wise condensation. With the possible exception of the Gettysburg Address, the Lord's Prayer, and maybe one or two others, there are few pieces which cannot be condensed to improve them. That this is true may be understood if you remember that authors themselves are quite willing to reduce in order to expand, paradoxical though the statement may be. Indeed, this method of localized adjustment is no different from that used in making an entirely new edition in a complete resetting. The financial set-up for a new edition allows the editor a fixed sum of money to make the books. He calculates the size of his books and scales his articles to fit the space available. If he is building a new edition out of an old one, he uses precisely the same methods I have just been describing, sending out pasted-up copies to be cut or expanded. The only difference is that in making the brand-new edition he resets all of his material—old and new.

Repair of Plates

Another item of expense to the publisher is the repair of plates. Ordinarily about $1500 a year is budgeted for the repair of plates alone. Repeated printing over the same plates wears down the type in spots. The printer, making ready for
the next printing, carefully examines those plates which are not to be patched or reset. The plates which show wear are then taken out and repaired for the current printing.

Index

With each change in an article the index must be examined to see if there is a corresponding modification required there. This is one of the most exacting of editorial tasks. Sometimes a card file of the index is used to control this work—500,000 cards for the *Encyclopaedia Britannica*. It has been found, however, to be considerably more difficult and has taken longer to make changes by way of the cards than directly from a checking of the new and old text and a simultaneous examination of the index for the key words. If the entries or key words originally in the article do not appear in the revised article, the index reference must be omitted, and the type of the index page extended to fit and patched. If the entry words or key words are moved to another quarter of the page or to another page altogether, the index correspondingly must be modified.

Maps

Maps are continually undergoing change at the hand of the cartographer. Our maps are made in Scotland. With each printing of the maps, proofs are sent to us with corrections indicated on press proofs. From these, changes to correspond are made in the index.

Proofreading

Professional proofreaders are permanently on the editorial staff. As copy is received, it is examined by the editor, O.K.'d for payment, and handed to the proofreader who styles the original copy. It then goes to the typist who types the copy on copy-fitting paper. When that is done the newly typed copy is read by the proofreader against the original copy. The copy-fitted paper is then returned to the editor for his final examination. If the copy is too long or too short, it is returned to the author for condensation or expansion. If the copy is only a little too long, an unnecessary word or two is struck out by the editor; or, if it is short by a few lines, it is expanded by carefully distributing a few paragraphs.

Copy, so far as proofreading can make it, is correct and fits into the page line for line, before it goes to the printer. We do not see copy in galley proof unless the copy does not fit. The new copy if correctly fitted is placed into the page and two sets of page proofs returned. The author receives one, the staff proofreader the other. The proofreader again reads against the original copy and the pages are then held against the receipt of the author’s corrected proof. When the proof is entirely cleared, it is returned to the printer and the page is platted.

This method of expertly proofreading copy on copyfitting paper before the printer receives it, has reduced alteration costs from as high as 40 per cent of the original manufacturing cost to less than 2 per cent. It also offers editorial advantages: it is possible actually to limit copy to the size of the excision, it is possible to index copy before the printer sees it and sets it in type, and it is possible to have the copy checked against related copy for consistency. It gives the editor a greater opportunity to scrutinize his material as a whole before the printer fixes it in hard lead type.
Not Always Easy to Find Exact Truth

Of course, all this preparation does not mean that errors of fact will not creep into the book. Since the human element enters into the making of books, errors are bound to creep in; and they will. But apart from that, as I have suggested, it is not always easy to find the exact truth. I will give you an instance.

Some time ago—and I forget the exact name of the river—a reader pointed out that he found in the *Britannica* conflicting statements concerning the length of an artificial river somewhere in Missouri. It was quite true. The length of the river differed in two articles. I attempted to run down this apparent inconsistency by writing to five authoritative sources, national, state, and local. Believe it or not, I received five different lengths for that particular river, all of them authentic. Now what is an encyclopedia to do? Or, another instance: Dr. A prepared for *Britannica Junior* a revision of the article on Austria. Dr. B prepared a similar article for the *Encyclopaedia Britannica*. Dr. B believes that the date of the Austrian *Anschluss* is the date of Hitler's entrance into Austria. Dr. A believes that the date of the *Anschluss* is the date of the proclamation. This difference of opinion is probably a difference of opinion held generally among historians. Think of the arguments there will be over this date down the years!

In discussing the problems of editing an encyclopedia I have said little about the contributors, how we find them, correspond with them and pay them. I have talked only of the less colorful aspects of encyclopedia making, the manufacturing and editing routine that can be accomplished only by a great expenditure of money. I have talked much about costs and little about authority. And, of course, the reason is that the chief problem of revising is a problem of fittings and costs. The authorities are many, gracious, and their services gladly given. The costs and the fittings are not nearly so tractable, if I may use the word. *They* are the editors' and the publishers' difficulty—and when a publisher devotes even a small portion of his income—when there is any—to a revision (provided his books are honestly prepared and honestly kept in value) the reader should be a little grateful. Because—and it is indeed a commentary on the folk who buy books—the publisher knows that his books will be bought whether they are worth buying or not, whether they are revised or not, and that there are many intelligent folk who will think them good books even though they may not be. He knows, too, that 75 per cent of the experienced book salesmen do not care what is inside a set of books—and can sell one set as well as another—whether they are useful books or not.

I say the conscientious publisher knows this as well as the unscrupulous one. The conscientious publisher, however, attempts to keep his books in value—and at a considerable reduction of his possible profit—year after year—by allowing his editor an annual amount of money (and every cent of it is needed) to do the best possible job he can. The business of revising books needs the business man even before it needs the editor and the scholar.