

CHAPTER 2

THE FIELD OF TECHNICAL WRITING

JOURNALISM is a broad profession. It deals with many fields of human activity and interest. Most people, when they think of the press, think of the daily newspaper, the weekly newspaper, the magazine. They do not always sufficiently realize the wide scope and the importance of the journalism of specialized fields, its bearing upon the life, the education, the industry of the nation.

These specialized aspects of journalism are usually referred to as the technical journalism field. In this field the writer deals with the technical materials in agriculture, home economics, engineering, science, industries and trades, business and the professions. He deals with them both through specialized journals and through the medium of more general publications, such as newspapers and magazines.

Training for technical writing: Men and women who plan to do more or less writing along these technical lines need in their equipment three things: a knowledge of the basic technique of journalism, a knowledge of their special technical field, and a training which will show the relation of the one to the other—which will give them the power to handle journalistically their special technical material.

This book will deal with the technique of journalistic writing as it is applied to such subject matter as agriculture, home economics, engineering, and the sciences.

Breadth of the technical journalism field: Training in technical journalism may lead to a wide variety of journalistic employments. The following list is not complete, but it contains the more important kinds of positions into which men and women with training in technical journalism have gone.

Journalists with agricultural training:

- Farm editorships with daily newspapers and news agencies.
- County newspapers.
- Editorial and advertising positions with farm journals.
- Publicity positions with farm organizations and agricultural industries.
- Editorial and publicity positions with agricultural colleges, state departments of agriculture, and the United States Department of Agriculture.
- Positions with advertising agencies.
- Radio positions with chains or stations which maintain agricultural programs.

Journalists with home economics training:

- Positions in the women's departments of daily newspapers.
- Editorial staff positions with women's magazines and farm journals.
- Publicity positions with women's organizations and industries.
- Advertising positions with magazines, agencies, and industries.
- Radio work.

Journalists with engineering training:

- Editorial staff positions with engineering and business publications and house organs.
- Editorships of special departments of daily newspapers.
- Publicity and advertising positions with engineering societies and associations.
- Advertising positions with engineering and business magazines and with advertising agencies.

Journalists trained in science:

- Editorial positions with magazines and scientific journals.
- Positions as science writers with news or press agencies.
- Editorial and publicity positions with scientific societies and organizations and with business firms.
- Advertising positions with magazines, agencies, and industries.

Such a list, in itself, indicates something of the breadth and variety of technical journalism. But consider also for a moment

the way in which matters relating to agriculture, engineering, home economics, and science permeate American life.

Writing about agriculture deals with the farms, their operation and management, with rural and community life, with the farm home. Farm people comprise more than one-third of our population. Count those who live in the rural community centers and in the smaller cities—agricultural capitals for surrounding farm regions—and who are directly dependent upon farming, and perhaps half our population has direct contact with agriculture.

Being as it is the greatest abstractive industry and second only to manufacturing in the total value of its annual finished product, agriculture is woven into the warp of life through the use of food and clothing and into the woof of most of our industries through the transportation, marketing, and processing of wheat, corn, cotton, tobacco, wool, flax, hides, hemp, fruit, vegetables.

So not only are the farmer and his family interested in any writing which relates to things agricultural or rural, but almost as vitally, the host of merchants and bankers of town and city and all those everywhere who have to do with the handling of agricultural products as they move from the farms to the ultimate consumers. Besides all these, in the cities are many men and women, country reared, who retain an active interest in rural affairs and agricultural problems.

Writing about home economics has as a primary reader group the millions of women who manage homes, rear children, and supervise the expenditure of a large share of the domestic budget. Increasingly in recent years the job of homemaking has become the subject of study and research. Most high schools and many colleges now give instruction in home economics, and research in this field is supported by college experiment stations, by the United States Department of Agriculture, by a number of research organizations, and by private industry.

Out of this new emphasis on home economics as a science and a profession comes a mass of news and information which, through newspapers, magazines, and other channels, is made available to women readers.

It is scarcely necessary to point out how squarely modern civil-

ization is based on science and perhaps particularly on the applied science of engineering. A tremendous volume of news about scientific discoveries, inventions, and engineering achievements is coming daily from the laboratory, from industries, and from government agencies—news which must be reported technically in the scientific and professional journals and popularly in the newspapers and general magazines.

Wanted, interpreters: The field of technical writing is, then, far broader than at first appears. It needs men and women trained to put into words, clearly and effectively, the day-by-day story of accomplishments in agriculture, home economics, science, and engineering.

Fundamentally, the press, whether it be agricultural, newspaper, trade, or magazine, has its economic and social excuse as an element, and a most important one, in the educative process. The press *is* because it serves. And it serves primarily in two ways: first, in the conveying to the rank and file of an industry, a class, or a profession, the ideas, the discoveries, the advances of the leaders in industry, class, or profession; second, in providing a mechanism by which the isolation of individual industries, classes, or professions can be broken down and ideas of common interest exchanged.

This is a job so fundamental, not only to individual groups but to society as a whole, that it should be served with the best intelligence and the best training. It should be served by men and women who have both a thorough training in the technique of the profession and a broad and firm conception of the nature of their task.

Specifically, the agricultural industry and mode of life are in need of interpreters. The problems of agriculture, both economic and social, are becoming more and more complex. Agriculture needs spokesmen; not only to its own folk, but to those others who need to know and understand agriculture's point of view.

In a similar way the home, the family, need their commentators and interpreters. The recognition of homemaking as a profession worthy of the best training and the most thorough study is a comparatively new one. In the very few years that serious study and

experimentation have been carried on in this subject, a vast bulk of material has been accumulated, which must be carried, largely through the printed word, to every homemaker, into every home. Clearly, the writer on homemaking has an important and worthwhile task.

What has been said applies with equal force to engineering in its many ramifications in industry. Nothing short of marvelous has been the extension of power and the machine into every field of life, and this development is only in its beginnings. It needs greatly the interpretation of the journalist fitted for the task.

A course in technical writing has the basic purpose of training men and women for these very important objects. It must give them a very thorough technical training in agriculture or home economics or science or engineering, it must base them in the technique of writing—for farm papers, household magazines, bulletins, trade papers, community papers, daily papers—and it must give them underneath all of this a high sense of their calling in the scheme of modern life.

Journalism training serves three groups: Training in technical writing will be useful to three groups of students:

1. A limited number who expect to follow some phase of journalism as a profession.

2. A larger group of men and women who can make good use of skill in writing for the press while working in other fields where the success of their labors depends quite largely on competent cooperation with the press. (County agricultural agents, home demonstration agents, extension and experiment station workers are of this group.)

3. Those who may be moved to use their education and special advantages for community leadership or who, in other occupations, find themselves at the sources of news which ought, for the advancement of agriculture, the home, or industry, to be widely disseminated.

What are the opportunities for the members of these three groups to put into practice the training they may receive in technical writing?

These opportunities are two-fold. For the man or woman who

intends to make journalism his life work, there is a wide variety of editorial and publicity positions. For those more casually interested in journalism there are inexhaustible avenues for service as contributor or free lance writer.

Value of journalistic training in other professions: Only a limited number of students who take a course which combines a technical training with journalism will look forward to a lifetime of work in an editorial or advertising position. A far greater number—those students belonging to groups two and three referred to on page 11—will use writing as a means to one of the following ends:

1. As a means to carry to others the practical knowledge of agriculture, science, engineering, and home economics which they have acquired.
2. As a means to advancing themselves in their profession or business.
3. As a means of adding to their income.
4. As a means of carrying on more successfully an integral part of their business or profession where either has important public relations aspects.

The agricultural college, extension staff, or experiment station worker will find that an important part of such an occupation is the preparation of bulletins, circulars, and publicity material. After a piece of research work has been done or a field survey completed, a bulletin or circular must be prepared setting forth the results. Often, in addition, an article can be written for a magazine.

The college man or woman will want to furnish information to the farm or scientific or women's magazines regarding his work. Practically all of the technical magazines are open to the college worker who wishes to submit articles. Contributions for these publications are welcomed and frequently sought after by editors.

There is no quicker way for a young college scientist or technician to make a name for himself than by sound writing. If he can write worthwhile bulletins or contribute to the farm papers or technical journals, he can gain recognition much earlier than the man who does not write. There is an especial opportunity for extension workers, who, through their travels, come in contact con-

stantly with the farmer and the homemaker and their problems, to keep their fingers on the pulse of actual conditions and gather a wealth of concrete material. This experience provides highly valuable subject matter for articles.

County agricultural workers, soil conservation specialists, home demonstration agents, and club leaders have found that one of the most potent aids in reaching their constituents with the material which they wish to emphasize is the writing of articles for the papers of their counties, both daily and weekly, and contributing an occasional article to the farm and other magazines.

More than one county agent will testify that one of the bugbears of his job has been the writing of these articles. Often, feeling himself unqualified, he has left this very important work to his secretary or the local reporter or editor. On the other hand, the county agent who has been fortunate enough to have had a course in agricultural writing while in college declares that it has made easy and much more effective the task of handling the publicity of his office.

In recent years the development of vocational teaching of agriculture, home economics, and industry has opened up another field for college graduates and another opportunity to write. The teacher of vocational agriculture, for example, is frequently called upon to write farm news or conduct a department in a local weekly or daily paper. The same is true of the teacher of vocational home economics.

This writing consists first of news dealing with the vocational work, the student projects, the special night classes, and work with adults. Often, too, it includes informational writing about current problems of the community farms and homes. The vocational teacher who has had some journalism training is likely to find that he or she is the only member of a high school staff who has had such training. In that event the vocational teacher may be called upon to write other school news and to supervise school publications.

These tasks give the vocational teacher an opportunity to enhance his or her value to the school, and render a service to the local newspaper and to the citizens of the school district and com-

munity. It also helps the teacher to become established, and it brings home to the community the value and importance of vocational teaching.

In other fields of educational work the value of training in news writing is of similar value. That is true of public school superintendents and high school principals, but especially of athletic coaches who find it important to keep in contact with local newspapers and to aid them in securing news of athletic activities. Physical education "majors" are now electing a course in journalism as a part of their training for coaching success, and properly so.

A field open to graduates in home economics is that of a home service worker for public utility companies such as the electric power company or the gas company. These home service workers are called on regularly to write. Stories of meetings are written for use in local newspapers. Some are called on to prepare weekly columns on foods and household equipment for use in newspapers. Often leaflets of an instructional or advertising nature must be written for distribution. There may also be articles for house organs or for trade magazines.

Graduates who are employed by wild-life conservation departments of state or Federal government soon find that part of their work is supplying news and information stories to newspapers, and writing articles on game, game management, hunting, and fishing for farm papers and outdoor magazines. A number of states issue monthly conservation magazines, which must be edited and for which articles must be prepared. Many students who are preparing for conservation work are taking a course in technical journalism as an essential part of their training. That has for years been true of forestry students, many of whom find after they are out in professional forestry work that writing is a part of their job.

An ability to write is often a means to reach a better position in the commercial world. An agricultural college graduate, who had taken some work in journalism and who is now with a large firm which handles a specialized farm product, secured the attention of the company officials in a short time through the articles he wrote for the house organ of the company. Thus singled out, he was watched, promoted, and within a few years was made manager

of a branch house, a responsible place. Any number of such examples could be cited.

Graduates in engineering, science, and business often find themselves in positions where either there is writing work to be done or good public relations to be maintained through newspapers or the trade and technical press.

Graduates in medicine, bacteriology, and veterinary medicine who enter the public health field find that publicizing their activities plays an important part in their work.

In numerous other lines of work where it is important to maintain good public relations and inform the public about industries or utilities, or other businesses which serve the people, some training in technical news writing is certain to be of value. The man or woman who understands what news is and how to write it is better equipped to cope with whatever circumstance may arise than one without such preparation.

Writing for money: Many men and women with understanding of news and a good measure of writing skill find opportunity to make some money by writing for publication as a sideline. What they earn is not always a great deal, but it is enough to be worthwhile. How much is earned in this way depends upon the individual, and especially upon his industry. Much depends also upon his good situation in a reasonably good news center.

Many magazines and periodicals pay outsiders for contributions. Often newspapers, too, pay someone who handles news assignments or who regularly contributes to a department, and who does this work as a sideline to some other activity.

Both farmers and homemakers have experiences or make discoveries which they would like to share with other farmers or women, if only they knew how to write them up and submit them to a paper. There is no reason why a farmer should not do this—or his wife, son, or daughter. Some of the most fluent writers who have contributed to farm papers have been men earning their living on farms.

Any or all of these individuals may have the urge to add to their incomes by writing for sale, beyond the necessary writing which they do in connection with their routine work. More than

one agricultural college man has added materially to his income by writing for farm and other publications. Women who have had work in journalism have written articles relating to experiences in their own homes and added to the family income without having to leave the home and family to do it.

In exactly the same way anyone in any technical or professional field can write on the side for publications. A construction engineer or an architect may contribute news articles to engineering or trade papers. A salesman on his trips can frequently pick up material for business articles. A scientist in his laboratory has a fund of information which he can translate into valuable articles for the general reader. Many news notes, feature articles, and informational articles in trade and business journals are contributed by writers who carry on full-time work but who write in spare time, on the side, to earn money.

The free lance field: Finally there is the free lance field. A free lance writer is one who, unattached to any publication, writes and sells wherever the best market can be secured. A large number of men and a lesser number of women devote their entire time to writing in this way. Perhaps a score could be named who live in Washington and depend upon information from the Department of Agriculture and other government departments and bureaus as sources of material.

Some free lance writers in reality have other positions which furnish them with the backbone of a salary, but they write constantly on the side as professional rather than occasional contributors.

For those who write for money, whether just occasionally or as a livelihood, the field for contributions is large. The farm papers, the women's magazines, feature pages of the daily papers, trade papers, and a large number of national general magazines are open for articles dealing with technical subjects.

There are in addition the technical and professional journals in the fields of science and research. These do not offer much of an opportunity for editorial positions or for contributing for money. They do, however, offer opportunity for a writer to make a professional name for himself by contributing to them.

The writer's equipment: There are normally four types of equipment prerequisite to success in technical writing. These are:

1. A practical background of experience on the farm, in the home, the laboratory, industry, business, or profession.
2. A thorough scientific training in the field of one's specialization.
3. An understanding of news and information values.
4. A training in the technique of writing.

The ability to write is purposely placed last in this list. Technical writing is a trade rather than an art. While the tools of the craft are words, the words and their combinations are not an end, but a means. It is the stuff that goes into the technical article that is the biggest determinant of its value. It must of course be well written, but what is said is more important than how it is said.

It is the experience of the writer, his judgment of the material whereof he writes, his ability to know where to find information, how to get it, how to size it up, to know what is essential and what is not, how to interpret his background of experience and knowledge, that make him the competent technical writer.

A course in technical writing, then, should first of all provide for a thorough grounding in the technical subject chosen by the student. The journalism instruction itself should be primarily concerned with the gathering of news and information and secondarily with the transposition of these into the written form.

ASSIGNMENTS

1. List by occupation or group the people in your home town or community who have a close interest in the affairs and information of one of the following: agriculture, home economics, women's organization activities, automobile business, construction, public health, chemical industry, processing or handling agricultural products, athletics and outdoor activities, transportation, highways and traffic, electrical equipment and appliances.

2. Count the number of stories in three issues of the same daily or weekly newspaper which have either a direct or indirect connection with your major interest as a student; for example, dairy manufacturing, farm crops, clothing, electrical engineering, highways, foods, vocational agriculture, social service, or bacteriology. Compute the total space in column inches devoted to such articles in each issue studied.

3. Write a discussion of about 300 words, amplifying the text, on why interpreters are needed in your own major field.
4. Make a list of all the publications in your state, excluding weekly and daily newspapers, which might be expected to print material on technical subjects. Give exact names and addresses. (Ayer's Newspaper Annual and Directory is the most convenient source of such information.)
5. Through an interview, ask someone who has contact with the public to describe for you as specifically as possible the publicity aspects of his or her position, and make a report on what you learn. An extension worker, a county agricultural or home demonstration agent, a county engineer, a public health officer, a school superintendent, a football coach, a local architect, a farm organization secretary, community fund secretary, or the manager of a local public utility company would be suitable, if the interview can be arranged.
6. Assume that you are engaged in some other work than journalism (as a teacher, farmer, research worker, and so forth) and discuss how you might find skill in journalistic writing of use to you.