

Reports and Letters

Wisconsin's Science Writing Program

The need for reporting of scientific events has been recognized by the press and the popular magazines for a long time. A recent survey [*Science* 123, 95 (20 Jan. 1956)] has shown that articles on scientific subjects are consistently among the most interesting to newspaper readers. Scientists generally have realized the need for wider dissemination and greater understanding of the findings, aims, and methods of science, so that applications can be made quickly for human welfare. Our experience has shown that news of scientific developments often reaches many scientists first through the nontechnical press. For these reasons, accurate popular reporting is important, and many of the larger scientific centers now employ specialists to disseminate accurate nontechnical accounts of research work.

To train specialists in science writing, a science-writing research assistantship, supported by the Wisconsin Alumni Research Foundation's annual research grant to the university, was established in 1948 as part of the program of the University of Wisconsin News Service. The assistantship fund is allocated to the news service by the university's research committee, of which Conrad A. Elvehjem is chairman. The holders of assistantships, two of which are provided each year (since 1954), enjoy a wide latitude of expression (press, radio, television), and they may study for advanced degrees in any field of science or journalism. Through the program, Wisconsin has become a pioneer center for the development of skill in this field, for testing old techniques and developing new ones.

All who have held the assistantship so far have been employed later as science writers, two with federal organizations (U.S. Department of Agriculture and U.S. Forest Products Laboratory), one for a university (State University of New York), and one for the Canadian Medical Association. Two assistants held the post longer than 1 year. The second writer trained under the program, Jane (Davidson) Schultz, wrote a paper in

partial fulfillment of the M.S. degree (granted in zoology) on readability of technical scientific writing. One interesting phase of her study concerned fairly marked differences in readability between the papers on parasitology appearing in four journals. Technical words and phrases are needed in scientific communication, she points out, but many writers compound reading difficulty by using multisyllable nontechnical words where simple ones would do. Among the examples she found were *multifarious*, *contemporaneous*, *cerebration*, *informational*, and *desideratum*. Summarizing, she wrote: "One, scientists use too many words in their sentences; two, they employ a supporting framework of nontechnical words which are chuck full of syllables."

Much of the Wisconsin science-writing program is devoted to the development of skills in straight reporting of scientific news and in writing feature articles. Most students holding the assistantships have had training in the biological and medical sciences or in science writing in these fields. Personally valuable to them is the field work interviewing scientists, translating scientific reports into news stories and articles, with readers of the popular and semi-popular press in mind, checking stories back with scientists, and evaluating the reception of their work in the press.

An account of the assistants' experience with the familiar techniques might be of some interest here. We have made fairly extensive use of the article series—three or four short articles intended for publication over as many days—to describe work in a broad field, such as cancer research. These are picked up widely by the state press and often have been adapted for one use or another by many types of publications. A second technique, one that eliminates any chance that rewriting will result in inaccuracies, is the matting of feature articles, with text usually accompanied by a photograph. Once prepared, such stories are easily cast into type and, for this reason, are particularly well received by small weekly papers.

To my knowledge, Wisconsin has the only graduate program in which research

assistants are permitted to specialize in science reporting exclusively and study for a higher degree in any field (thesis research must, however, be carried on independently of the science-writing program if necessary for a degree). The yearly stipend is \$1620. It would seem that greater effort to train writers on scientific subjects must be made if we are to progress as rapidly in interpreting science as science has progressed in devising ways to reveal new knowledge of the universe.

JAMES A. LARSEN

University of Wisconsin
News Service, Madison

2 February 1956

Use and Abuse of English in Science

The following remarks are part of the leading article that appeared under the title used here and in the same issue of Nature (5 Nov. 1955) in which John R. Baker's article (see page 713) was first published. This excerpt is reprinted here by permission.

On the question of the use of a German construction for the sequence of adjectives and nouns, Dr. Baker is probably right in stating that the practice is growing. In some cases—and Dr. Baker quotes examples—only the judicious use of the occasional hyphen can save a phrase from meaning the reverse of what is intended; the meaning may still be obvious from the context, but it should not be necessary to have to go to the context in such short phrases. It is difficult to find any real justification for the use of this style. To a limited extent it may give crispness to a statement and save the use of the word *of*; but its general adoption seems dangerous and unnecessary. Dr. Baker's examples could readily be multiplied, and point to the growth of a new style in scientific writing which has nothing to commend it.

Pasing now beyond Dr. Baker's article, reference may be made to another tendency—perhaps it is only a mannerism—which has been noticed in recent years, namely, an unusual use of some common verbs. Thus an author may write that he "reacted zinc with hydrochloric acid," or he "combusted" something, or that "a metal distorts upon cooling," or that "a wave propagates in a straight line." Such phrases are frequently seen in communications submitted to *Nature*, from Great Britain as well as elsewhere, and sometimes it is difficult to be sure whether or not a new technical meaning is being given to a hitherto common word. Unless some particular quality is intended by the use of common words in this way, it would seem that an unnecessary grammatical change is being introduced. The English language, in spite of its lack of