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Obscurantism vs Enlightenment

The value of technical literature can be measured by the ability of the reader to make effective use of the knowledge it contains. Authors, editors, and reviewers are involved in the process of making new information meaningful and understandable. The following quotation from S. A. Goudsmit* seemed so appropriate to some of our problems that we have decided to reprint it for you and add some thoughts of our own.

"Referees and editors often complain about the obscure style of the majority of Letters and Articles. In addition to using unintelligible, twisted sentences, many authors create and use slang expressions known to a few specialists only, and indulge in unnecessary abbreviations. Such practices may help the writer but they slow down the reader considerably and exclude the uninitiated completely. In fact, many papers give the impression that the author was writing a memorandum to himself or merely for the benefit of a close collaborator. Yet when we ask authors to write their papers so that a few more colleagues can appreciate their significance, some of them rebut that popular articles do not belong in our journal.

"We are convinced that an Article or even a short Letter can be written in a style that helps the interested physicist to understand its aim even if he is not a specialist. One of the causes of bad writing is that so many young research physicists lack teaching experience. They have never faced the challenge of explaining something they know very well to a student who knows nothing about it.

"But there is still another reason for writing an obscure paper. It is the common subconscious fear of exposing oneself to scrutiny. If a paper is too clear, it might be too easy for readers to see through it and discover its weaknesses. We observe this same behavior with the lecturer who writes a formula on the blackboard and erases it almost immediately. We see it with speakers who address the blackboard instead of the audience and who keep the room dark between slides. They themselves do not realize that they are subconsciously afraid of being clearly understood.

"Thus we believe that writing incomprehensible papers is not an indication of the author's erudition but merely reveals a common psychological defect. We hope that this insight will induce a few more of our authors to come out from behind their screen of specialized terms and machine-inspired sentence constructions."

We are sure that "obscurantism" has been apparent to you in some of the papers we have published. We know that many of you must be as appalled as we are at the poor quality of many of the preprints at our meetings. To the general charge to avoid either deliberate or subconscious obscurantism, we would add the following advice to authors:

1) If in doubt, leave it out.

2) If you can explain it, do so in direct, basic English, using the simplest and most unambiguous wording you can find.

3) Write from a good outline. Develop lines of thought directly, accurately, and concisely.

4) Say it once, correctly. Do not fill your paper with redundancies, which either will be obviously unnecessary and wasteful of the reader's time or will cause confusion by making the reader wonder if he misunderstood what you were trying to say earlier.

5) The point made in the quotation that many papers are poorly written because the authors had no teaching experience is a good one. Imagine that you are writing to an intelligent colleague who has never worked in your particular field or specialty. If excessive explanation would be required for the nonspecialist, cite a good, readily available reference, which will explain the fine points.

6) Avoid unnecessary name-dropping, but do not forget to give credit when credit is due by citing *pertinent* background references. The former is a sin of commission; the latter, a sin of omission. Strike the happy medium.

7) Remember that your purpose is to communicate new knowledge to your fellow scientists and engineers around the world. This includes your colleague across the hall, your boss, technical reviewers, editors, foreign students, people who will switch from different work to this specialty next year, and maybe your boss on your next job. If you serve others well, you also will serve yourself well. Few accomplishments can do as much to establish or enhance professional stature as can one well-written and widely read paper. The converse is apparent: poor writing can obscure or cause the neglect of a bright technical achievement; and a lazy or sloppy job by one who could have done better is an offense to his peers that will subtract from his professional stature in their eyes.

8) If you need help, seek it; if you need time, take it. Use deadlines as incentives but not as excuses.

9) Don't oversell. Obvious salesmanship will sour the reviewers (who are likely to be your competitors) and the editors, and exaggerated technical claims will cloud the real merits of your work and may cause all of it to be doubted or ignored. Stick to the facts.

To you who have administrative or public relations duties, we would like to address a few questions. We raise these questions because some of the poorest papers have come from some of the biggest and supposedly best equipped organizations.

1) Don't you agree that a well-written journal paper is a valuable asset to both an author and his organization, whereas a poorly prepared paper reflects unfavorably on both?

2) Is writing or editing help available to those on your staff who need it? Are they encouraged to seek it?

3) Are authors encouraged to spend the time required to do a good job on their papers?

If each of us, author, administrator, reviewer, and editor, aims for papers written clearly and concisely to *enlighten* his colleagues, we will have better journals, and we will get more mileage from them.

Gordon L. Dugger
Editor-in-Chief

* Goudsmit, S. A., "Obscurantism," Phys. Rev. Letters **13**, 519–520 (October 26, 1964).