

## THE PRINCIPLES OF POOR WRITING

By Dr. Paul W. Merrill, Astronomer, Mount Wilson Observatory.

Books and articles on good writing are numerous, but where can you find sound, practical advice on how to write poorly? Poor writing is so common that every educated person ought to know something about it. Many scientists actually do write poorly, but they probably perform by ear without perceiving clearly how their results are achieved. An article on the principles of poor writing might help. The author considers himself well qualified to prepare such an article; he can write poorly without half trying.

The average student finds it surprisingly easy to acquire the usual tricks of poor writing. To do a consistently poor job, however, one must grasp a few essential principles:

1. Ignore the reader.
2. Be verbose, vague, and pompous.
3. Do not revise.

### IGNORE THE READER

The world is divided into two great camps: yourself and others. A little obscurity or indirection in writing will keep the others at a safe distance. Write as if for a diary. Keep your mind on a direct course between yourself and the subject; don't think of the reader -- he makes a bad triangle. This is fundamental. Constant and alert consideration of the probable reaction of the reader is a serious menace to poor writing; moreover, it requires mental effort. A logical argument is that if you write poorly enough, your readers will be too few to merit any attention whatever.

Ignore the reader wherever possible. If the proposed title, for example, means something to you, stop right there; think no further. If the title baffles or misleads the reader, you have won the first round. Similarly, all the way through you must write for yourself, not for the reader. Practice a dead-pan technique, keeping your facts and ideas all on the same level of emphasis with no telltale hints of relative importance or logical sequence. Use long sentences containing many ideas loosely strung together. And is the connective most frequently employed in poor writing because it does not indicate cause and effect, nor does it distinguish major ideas from subordinate ones. Because seldom appears in poor writing, nor does the semicolon -- both are replaced by and.

Camouflage transitions in thought. Avoid such connectives as moreover, nevertheless, on the other hand. If unable to resist the temptation to give some signal for a change in thought, use however. A poor sentence may well begin with however because to the reader, with no idea what comes next, however is too vague to be useful. A good sentence begins with the subject or with a phrase that needs emphasis.

The "hidden antecedent" is a common trick of poor writing. Use a pronoun to refer to a noun a long way back, or to one decidedly subordinate in thought or syntax; or the pronoun may refer to something not directly expressed. If you wish to play a little game

with the reader, offer him the wrong antecedent as bait; you may be astonished how easy it is to catch the poor fish.

In ignoring the reader, avoid parallel constructions which give the thought away too easily. I need not elaborate, for you probably employ inversion frequently. It must have been a naive soul who said, "When the thought is parallel, let the phrases be parallel".

In every technical paper omit a few items that most readers need to know. You had to discover these things the hard way; why make it easy for the reader? Avoid defining symbols: never specify the units in which data are presented. Of course it will be beneath your dignity to give numerical values of constants in formulae. With these omissions, some papers may be too short; lengthen them by explaining things that do not need explaining. In describing tables, give special attention to self-explanatory headings; let the reader hunt for the meaning of Pr .

### **BE VERBOSE, VAGUE, AND POMPOUS**

The cardinal sin of poor writing is to be concise and simple. Avoid being specific: it ties you down. Use plenty of deadwood: include many superfluous words and phrases. Wishful thinking suggests to a writer that verbosity somehow serves as a cloak or even as a mystic halo by which an idea may be glorified. A cloud of words may conceal defects in observation or analysis, either by opacity or by diverting the reader's attention. Introduce abstract nouns at the drop of a hat - - even in those cases where the magnitude of the motion in a downward direction is inconsiderable. Make frequent use of the words case, character, condition, former and latter, nature, such, very.

Poor writing, like good football, is strong on razzle-dazzle, weak on information. Adjectives are frequently used to bewilder the reader. It isn't much trouble to make them gaudy or hyperbolic; at least they can be flowery and inexact.

**Bible:** Render to Caesar the things that are Caesar's.

**Poor:** In the case of Caesar it might well be considered appropriate from a moral or ethical point of view to render to that potentate all of those goods and materials of whatever character or quality which can be shown to have had their original source in any portion of the domain of the latter.

**Shakespeare:** I am no orator as Brutus is.

**Poor:** The speaker is not, what might be termed an adept in the profession of public speaking, as might be properly stated of Mr. Brutus. (Example from P. W. Swain. Amer. J. Physics, 13, 318, 1945).

**Concise:** The dates of several observations are in doubt.

**Poor:** It should be mentioned that in the case of several observations there is room for considerable doubt concerning the correctness of the dates on which they were made.

**Reasonable:** Exceptionally rapid changes occur in the spectrum.