

## TEN WRITING RULES FOR WRITING GEOLOGISTS

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INTRODUCTION

In general, we geologists do not write as poorly as other scientists and engineers. However, we do write more voluminously, and considering this, our writing is somewhat sloppy. Occasionally, organizations that hire geologists register strong complaint to universities about geologists who express themselves poorly in written communication.

Generally, the geologist who writes in the English language is not troubled with fundamentals of grammar, punctuation, and capitalization. Certain facets of his writings, however, are poor in expression or lacking in logic. Often, his semantics is confused. Fuzzy semantics is likely to either reflect or lead to fuzzy thinking. Item 7 in the rules illustrates this point. For example, if one writes that two joint directions are prominent in a given area. What does this mean, directions? How many sets of joints are prominent—two, three, four, or more?

A living language is in continual state of flux. Levels of words and meanings change, rising from the vulgar to the colloquial to the formal only to fall to the obsolete and to the archaic. Idioms are fossilized attempts to be poetical, to originate (or mix) a metaphor, or to reinforce a meaning. Their formation has nothing to do with logic (Horne, 1962, p. 5).

The living language, in general, may be granted this broad freedom of loose development, but scientific language is more restricted. It should be as logical as the scientific method.

The author presents 10 rules that he feels geologists need to consider. These are derived from a study of published papers, books, manuscripts, and reports (including the author's) written by geologists. Good writing is not difficult to master. For the main part, the practice of good writing is simply a matter of being aware of its importance.

How important is written communication? In a real sense, we only write for one purpose—to please the reader. Can we, then, afford to irritate him?

Wide latitude for expression of style should be allowed scientific writers, although perhaps not as wide as that allowed for other writers. The author does not feel that the rules listed will "cramp anyone's style." On the hand, he realizes that a number of the rules border on matters of taste or opinion. In writing this paper, the use of some material collected by Dr. John F. Lance is acknowledged, particularly the reference list.

## TEN RULES

1. Come to the point first. Explain and expand later. This applies to letters, papers, reports, divisions and subdivisions, paragraphs, and sentences. Occasional use of the "reverse" sentence is justified for variety.

2. Avoid long series of adjectives and long hyphenated adjectives.

3. Always use commas: (a) following introductory adverbial clauses, (b) to separate independent clauses joined by and, but, for, nor, or, neither, yet, and (c) to enclose nonrestrictive clauses and phrases within a sentence.

These three cases of comma usage are illustrated (correctly) in the following sentence: After a brief survey, we find that granite, which contains feldspar, is common in Arizona, and granite which has abundant pegmatitic and aplitic facies is common in the Sahuarita Mountains.

4. Do not use "there is" or "there are" (manual stuttering) or the indefinite pronoun it. The only justified exception for the latter might be "It is raining (or snowing)." It isn't raining rain to me. It's raining its.

The pronoun, it, applies to corporations, societies, institutions, and most governmental bodies. For example: The Anaconda Co. has ample copper reserves for several decades because of its success in exploration. It has acquired control of new properties south of Tucson.

5. Write in the present tense when at all possible, even when referring to past publications, e. g., "Daubree (1879) states that . . . ." Write as if the report is a study, not as if you are reporting on a study that has been made.

6. The assumption of synonymy for the words instance, case, and place is incorrect. This is also true for the words as, because, and since.

7. Neither planes nor buckled planes have direction.

WRONG: The main joint directions are northeast and northwest.

CORRECT: The main sets of joints strike northeast and northwest.

REDUNDANT: The faults strike in a northeast direction.

WRONG: The direction of the folds is northwest. (What does this mean?)

CORRECT: The directions of fold axes are northwest. Axial planes of the folds strike northwest. The crests of the folds have northwest bearings. Axial traces of the folds are northwest.

8. A line does not dip.

WRONG: The drill hole dips  $60^{\circ}$ . The fold axis dips  $60^{\circ}$ .

CORRECT: Inclination of the drill hole is  $60^{\circ}$ . The fold axis plunges  $60^{\circ}$ .

9. When the orientation of a line can be defined by either of two

opposite bearings, (1) the recording of both is redundant, and (2) use of north quadrants is preferred, giving added preference to east over west.

WRONG: Fractures striking north-south, S. 40<sup>0</sup> E., and east-west are common in the area.

CORRECT: Fractures striking north, N. 40<sup>0</sup> W., and east are common in the area.

10. REDUNDENTLY YOURS: The Mission mine is in Pima County. It is not located in Pima County. The sandstone is red. It is not red in color.

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