TOWARD DEFINING "GOOD" WRITING: A RHETORICAL ANALYSIS OF THE WORDS, SENTENCES, AND PARAGRAPHS IN 16 INDUSTRIAL SCRIPTS

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INTRODUCTION

The report on research which follows addresses a significant problem of technical and scientific writing and, in particular, of recent theory and practice in writing across the curriculum programs.[1] These programs and the theory which informs them have proceeded as if teachers of English and technical writing and teachers of writing in all disciplines agreed on a definition of "good" writing. However, in workshops offered to interdisciplinary faculty groups at Michigan Technological University it became obvious that we could reach no satisfactory agreement on a definition of good writing. In addition, no systematic research or study has attempted to define the features of writing which would go to make such a definition. English departments, and universities in general, have shown little or no interest in such an investigation and have proceeded to teach technical writing as if such information had no bearing on pedagogy or on a student's efforts to learn to write well for industrial and business audiences. Joseph Williams, lamenting this situation, notes " . . . we know next to nothing about the way individuals judge the quality of writing in places like Sears and General Motors and Quaker Oats. What counts as good writing at Exxon? . . . It is the obligation of universities to support the research that would tell us, so that we would know what to teach . . . and yet virtually no such research exists."[2] Our intention in undertaking this research was to move toward forming such a definition.

We wanted to know, or at least to begin to answer, the following: What constitutes good writing in the real world? What kind of writing will students actually do after they leave the university? To what extent are the features of this real-world writing determined by aim, mode, and audience? Does the English teacher's definition of good writing, as indicated by

textbook maxims, have any substantial connection to the writing students will be expected to produce in industry and business? Does current pedagogy actually prepare students to write as they will have to outside of the English class? In asking these questions we are aware of a number of problems associated with beginning such research. First, this research must initially identify a wide range of features from writing considered good by readers in industry and business. We begin then with an assumption that good writing is not exactly a product or object but, to some extent, a perception of a product. That is, readers define the quality or the success of a piece of writing. We embark, therefore, on research which initially derives from the observations of specific readers. While aware of the problems inherent in such research and particularly in the tentative kinds of conclusions which we can draw from it, we see no other way to start. The analysis of published writing in popular journals, e.g., Harper's, The Atlantic Monthly, The Saturday Review, has been extensively used by researchers like Kellogg Hunt and Richard Braddock, but for our purposes such sources are inappropriate. Analysis of student writing is not at all to the point, nor is analysis of process at this time. We have been concerned, in fact, that composition theory and pedagogy have shifted too much toward the composing process with a resultant neglect of the product. Knowledge of the process of writing will not, by itself, enable students to write better products since the process itself may be determined by the form the product must assume. This is especially true in industry and business where formats and textual features are often fairly rigid. In addition, most theories of process include among the stages of the process frequent stages of revision. When revising, a writer must make corrections or additions to his work. Whatever name we give to a writer's sense of completion we assume that the writer must know when he has arrived at some closure (even if only at a point where he wishes to submit the writing to another reader). This requires that the writer has the ability to read his work. Students must understand what constitutes a successful piece of work across a variety of disciplines, in business, and in the general world of work. The most economical way to do this is to examine what passes for good and successful writing in a field and then to go through the processes which produce similar writing. At every revision, however, the student must be able to read his own and his peers' work with a consciousness of the important features required.

Our concern is to begin to identify those features of technical/industrial writing which appear consistently across a variety of written modes and which professional writers use for a variety of purposes. The analysis of any single feature for statistical reliability and validity remains, we are aware, for future follow-up research.

The central purpose of our work is to develop a wide-ranging list of features. Our study depends on the analytic tools generally associated with literary research--close reading and careful textual analysis. Any such research suffers from certain subjective limitations. For example, reading a paragraph and deriving the topic sentence depends on what a reader considers to be the thesis of the paragraph and of the whole discourse. We usually agreed about such matters, but, on a significant number of occasions, we disagreed. Such disagreements had to be resolved through re-reading and

discussion (future researchers might well wish to work with a number of trained readers, a luxury we could not afford). Indeed, once we were past the analysis of features which we could easily count or define (the limits of a sentence, subordinate clauses, T-units, passive or active voice) we found it much more difficult to come to exact agreements. This fact perhaps sheds some light on the subjective nature of the reading process, even of technical discourse. Certainly it explains the hesitancy of many empirically trained researchers to tackle the problem.

METHODOLOGY

Because we required writing identified as good by industry and business readers our first task was to collect samples from them. We requested samples from a variety of industrial sources, e.g., IBM, ALCOA, Exxon, Weyerhaeuser, Bell Labs, Underwriters Laboratories, Dow Chemical, U.S. Steel, Onan Corporation, and others. We tried to identify writers within the industry or business, that is, individuals specifically involved with producing or reviewing writing done in the work place. They ranged from members of technical writing departments to superintendents of divisions within corporations. We asked for writing which "would serve as a model for incoming or present employees--the kind of writing you want done in your office or corporation." We requested that the samples fall into two broad categories: writing which primarily informed and writing which primarily persuaded. Within those categories we requested writing directed at two audiences: a specialist audience and a lay audience. We received 57 pieces of writing from industrial/corporate sources. This paper reports on the analysis of 16 complete pieces of discourse--four samples from each possible category (a piece to inform a lay audience, a piece to inform a specialist audience, a piece to persuade a lay audience, a piece to persuade a specialist audience).

While we collected our samples, we designed analysis sheets for each of the five levels we intended to study: 1) word level 2) sentence level 3) paragraph level 4) discourse level 5) readability. At each level we had to decide what features we wanted to examine and whether or not each feature could be quantified. At the word level, for example, it was easy to establish percentages of monosyllabic and polysyllabic words; it was impossible, however, to count specialized words with absolute precision because of the subjectivity or relativity inherent in the concept "specialized." Similarly, at the paragraph level it was easy enough to count words and paragraphs per discourse, but it was much more difficult to tabulate methods of organization and development. In designing these analysis sheets, we also had to establish consistent procedures for examining each text since we would read the text separately. We had to decide how much of each sample actually to study and how to locate those passages within the overall discourse. These early decisions, along with some trial readings, resulted in a fairly tight and consistent analysis of scripts. For the present report we have completed analysis of the first three categories. This includes, at the word level, amount of syllabism, verb selection, nominalizations, and vocabulary choices. At the sentence level we counted T-units, measured sentence length, clause length, and degree of subordination, and determined syntactic order. On the paragraph level we examined patterns, methods of development,