

## GRAMMAR DIFFERENCES BETWEEN STUDENT AND PROFESSIONAL REVIEWERS

by Edward Jayne  
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I featured the statistical analysis of grammar in my reviewing class last semester because it had long since been evident--to me, at least--that the verbal liberties of published reviews significantly differ from what is commonly taught in most news, feature, and expository writing courses. Though the insights and vocabulary might vary from one professional reviewer to the next, they all share the same effort to inflate their verbal expression as a source of entertainment additional to the ideas they convey. As a result, reviewers stretch style well in excess of student performance levels, and the appropriate task in teaching prose style to students who aspire to become reviewers obliges the cultivation of this particular talent.

Exactly how, then, is reviewing style different from the writing styles commonly emphasized in English and journalism departments? This is the question my student assistant Suzanne Bindemann and I tried to confront last semester, and toward this end we made statistical comparisons between the prose of eight prominent film reviewers (two reviews apiece) and student reviews gathered at the beginning and end of the semester. Students were also enlisted to explore comparisons between their own reviews and those of reviewers they admired. Though our arithmetic must be double-checked and several of our tabulating procedures completely revised, preliminary results are sufficiently impressive in my judgment to warrant a brief summary of our results.

Perhaps the most compelling statistic unearthed by our study has been its simplest, the calculation of sentence length. A 26.03 average of words per sentence (with a tight 1.72 Standard Deviation) was obtained among the eight film reviewers with national reputations: David Denby, Judith Crist, Stanley Kaufman, Lawrence O'Toole, Richard Schickel, David Anson, Richard Hatch, and of course Pauline Kael. The sentence length averages in student reviews at the beginning of the semester were unacceptably low despite my warnings--a 21.32 average, almost five words shorter than for professional reviewers. In other words, sentences on average were only 82% as long as in professional reviews. More telling yet was the difference of 2.74 Standard Deviations (or SD's, a measurement based on the average difference from the mean). The SD difference between student and professional samples indicates a much greater variation in the length of student reviews, which were shorter on the average but with far more variation in both the initial and final reviews. By the tenth week, however, the class average was brought to virtually the same level as for professional reviewers--an accomplishment all the more remarkable because the SD was even larger and we had no idea at that point in the semester that 26 words could be construed as an exact target.

Also important is T-unit length, Kellogg Hunt's measurement of grammatical units inclusive of a main clause plus all modifiers such as phrases and subordinate clauses. What is effectively measured by this approach is the degree of subordination within T-units as opposed to the length of sentences expanded on a coordinate basis among a potentially infinite number of T-units ("She said . . . , and I said, . . . , but she replied, . . ." etc.) For professional reviewers, the average T-unit length turned out to be 19.02 words, indicating a frequency of four main clauses for every three sentences. Altogether, there seems to be a healthy intermixture of simple and

more complicated sentences, even in the prose of Pauline Kael, whose .63 sentence/T-unit ratio discloses the most ambitious use of “narrative” sentences (“narrative” in the sense that sentences are dramatically sequenced at the expense of subordination). The expansion of T-unit length among student reviews over the course of the semester was remarkable--in fact excessive. From a 17.26 average, which was slightly higher than Kael’s score and a healthy 91% of the average for professional reviewers, my students expanded the average length of their T-units to 22.74, 20% greater than the professional average and only slightly less than Schickel’s score. As the primary source of this increment, at least four students (V.B., A.C., V.P, and J.S.) achieved much higher levels that undoubtedly need to be reduced. In other words, their sentences had become too tight, insufficiently narrative. My use of Christensen’s emphasis upon sentence modifiers (terminal adjective, participle, and absolute constructions) might well have been taken too far.

Also impressive is the high ratio of parallel constructions per sentences by professional reviewers, as demonstrated by the 1.49 average, roughly indicating that three examples of parallel structure may be found in every two sentences. Though parallel constructions are exaggerated in political speeches at unacceptable levels, their use also typifies a mature style when under sufficient control with an effective balance between coordination and subordination. Parallel constructions heighten the rhetorical impact of what is said as well as declaring an equivalence that seems both valid and free of redundancy relevant to what is being said. In its simplest manifestation (“Dick and Jane ran and jumped”), the use of coordination seems almost blatantly obvious, but in mature prose its use becomes a major challenge, providing perhaps one of the most obvious differences between professional and non-professional performance levels. In any case, the class may be considered successful in having raised its average from 1.0 per sentence to 1.13 by the end of the semester, an advance from 67 percent to 76 percent of the professional average. However, this is still more than a full SD below the average for professional reviewer. It seems obvious at this point that students must be repeatedly encouraged to explore the use of parallelism as one of the easiest ways to suggest equivalence among words and phrases (“and” serving to imply “is equal to”) as well as producing a verbal plateau that highlights their combination against the rest of the sentence.

To measure the heightened vocabulary of movie reviewers, I established two categories: (a) syllables divided by words, and (b) word count per million according to the Thorndike-Lorge tabulations in their text *The Teacher’s Word Book of 30,000 Words* (Columbia, 1944). The syllables category has been useful, but even more relevant to my project has been the word frequency category. For professional reviewers it indicates a 12.83 average in usage per million--as compared to my class average of 30.2 for the first assignment of the semester and a somewhat improved 24.56 count for the final assignment. Obviously, a lower average indicates a more advanced vocabulary level, and, conversely, higher averages are symptomatic of less challenging vocabulary, perhaps the most intractable deficiency in student writing. As every composition teacher knows all too well, one cannot discount the importance of our Anglo-Saxon verbal heritage, but the actual publication of reviews also obliges superior descriptive facility with a comfortable balance between high and basic wording.

For the syllable-words ratio my students started out at 1.45, only 13% below the professional average, but in fact this difference reflected a “real” discrepancy of 1.46 SD’s--much greater than the raw scores might indicate. In contrast, the 1.63 average my students ended up with in their finally reviews actually exceeded the professional average by .56 SD, obviously because longer words were sought out to demonstrate verbal adequacy at the expense of sufficient balance with more basic words. In contrast, there was a much lower reduction from 4.98 to 3.36

SD for word frequency (1.62 altogether). In other words, relevant to the length of words there was a 61 percent improvement in student reviews compared to professional reviews, as opposed to only a 33 percent improvement regarding verbal infrequency. It would seem that length too often substituted for verbal appropriateness.

Student improvement in the use of relative constructions from .154 to .313 seems entirely sufficient, perhaps even excessive, since the professional average of .305 drops precipitously to .253 if Lawrence O'Toole's prose samples are excluded from the tabulation among professionals. Class improvement was healthy in my judgment, and I wouldn't tamper with my approach to this particular category until more refined distinctions can be made (for example by establishing the balance among clauses and phrases).

Reviewers often succumb to the enlargement of attributive modifiers at the beginning of sentences ("This useful but somewhat awkward parenthetical example illustrates what I mean"). Their average use of these words, of .083 (one per 12), seems relatively high, in fact, compared to adjective frequency in student writing once sentence length has been equalized--still a fourth of an SD. Students seem uncomfortable with descriptive augmentation in the attributive position at the beginning of sentences, but I would suspect that the reduction in my students' average from .076 to .067, from one per 13 words to one per 15, is not statistically significant. As much as anything it probably reflects dramatic increases in sentence length rather than any losses at the beginning of sentences.

The consistent pattern of expansion in SD's between the first and tenth weeks deserves to be mentioned. Here it seems useful to recognize that for the so-called normal curve, a single SD encloses roughly 68 percent of all differences (34 percent both above and below the mean), the second SD encloses roughly 92 percent, and the third roughly 99 percent. If the SD for the word-sentence ratio increases from 3.28 to 3.56 between the two samples, this indicates an increased gap in student performance, some students better able than others to lengthen their sentences in response to my encouragement. It would accordingly be normal if the statistical mean of any category increases for the group as a whole, but with concomitant increases in SD that indicate greater variation among students, some with very modest increases and even reductions that might in fact be entirely justified. In some instances, for example regarding sentence length, the SD remains stable despite a substantial increase in the mean from earlier samples, but in other instances, for example word frequency, the SD increment indicates variable levels of success in the effort to match professional standards.

Perhaps the most optimistic indication of success in my use of statistics to teach the course would be the cumulative improvement for the class as a whole in z-score deficiency compared to averages among professional reviewers from minus 1.39 SD's to minus .31 SD's--roughly the difference of a single SD toward the performance level of professional reviewers. This is equivalent to the difference in verbal IQ between 100 and 116, or between 116 and 128. Of course writing style typical of movie reviews differs from IQ as measured by vocabulary tests, but the analogy suggested here indicates a substantial level of improvement obtained during the semester. In effect, the semester's experiment produced changes of at least a full SD for the class as a whole.

But as I have said, the study is yet in its preliminary stages and, as far as I know, totally unprecedented. Reliability coefficients would need to be determined, and I doubt that our sample is big enough to be able to claim statistical validity for either the students or professional re-

viewers. Likewise, many other categories seem possible as valid considerations in contrasting student and professional reviewing styles: nouns/total words, specific phrase and clause frequencies, and sentence variety as measured by the SD among sentences in a single passage come readily to mind. Finally, of course, it remains of paramount importance in an English class that features the approach I am suggesting here to recognize the risks involved when putting too much emphasis upon statistics. Some kind of a grandfather's clause would be needed to accommodate students totally threatened by its methodology, and, as with any other measurement, it is important to recognize that statistics only delivers results relevant to what gets measured. Also, a *je ne sais quoi* always presents itself, a residue of seemingly unmeasurable qualities to be taken into account when judging prose style. As with any theory of grammar, it is entirely possible to write horrendous sentences that meet all the criteria emphasized by the model, yet fall short of adequate expression. As an English professor, I accordingly respect the necessity to stand back and judge all prose style--of students, professional authors, and everybody else --on a finally subjective basis. However, as an amateur psychometrist I also reserve the right to make an effort to measure it.

In any case, I am delighted with the semester's project, since it demonstrates at least the potential value of statistics in teaching prose style. But even more important, I suspect, all future students will benefit from my approach, both those exposed to its methodology and those whose work can be judged based on my findings in other courses.

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### PROFESSIONAL REVIEWERS

|                       | words<br>per<br>sentence | words<br>per<br>T-unit | parallel<br>construc-<br>tions | relative<br>clauses | attrib<br>adjs. | syllables<br>per word | word<br>fre-<br>quency |
|-----------------------|--------------------------|------------------------|--------------------------------|---------------------|-----------------|-----------------------|------------------------|
|                       | —                        | —                      | —                              | —                   | —               | —                     | —                      |
| David Denby           | 26                       | 19.5                   | 1.5                            | .23                 | .17             | 1.6                   | 15.9                   |
| Judith Crist          | 28                       | 20                     | 1.85                           | .22                 | .03             | 1.6                   | 13.7                   |
| Stanley Kaufman       | 28.6                     | 19.5                   | 1.45                           | .29                 | .05             | 1.7                   | 15.7                   |
| Lawrence O'Toole      | 25.4                     | 19.6                   | 1.0                            | .44                 | .13             | 1.4                   | 17                     |
| Richard Schickel      | 25.4                     | 22.8                   | .89                            | .25                 | .07             | 1.5                   | 7.5                    |
| David Anson           | 26.2                     | 17.6                   | 1.1                            | .29                 | .12             | 1.6                   | 14.6                   |
| Richard Hatch         | 22.5                     | 16.5                   | 1.2                            | .25                 | .02             | 1.7                   | 7.7                    |
| Pauline Kael          | 26.2                     | 16.7                   | 1.5                            | .23                 | .08             | 1.55                  | 10.5                   |
| <hr/>                 |                          |                        |                                |                     |                 |                       |                        |
| Average               | 26                       | 19                     | 1.5                            | .31                 | .08             | 1.6                   | 12.8                   |
| Standard<br>Deviation | 1.72                     | 1.93                   | .35                            | .073                | .062            | .09                   | 3.49                   |

### STUDENT REVIEWERS

|             | words<br>per<br>sentence | words<br>per<br>T-unit | parallel<br>construc-<br>tions | relative<br>clauses | attrib<br>adjs. | syllables<br>per word | word<br>fre-<br>quency |
|-------------|--------------------------|------------------------|--------------------------------|---------------------|-----------------|-----------------------|------------------------|
|             | —                        | —                      | —                              | —                   | —               | —                     | —                      |
| V.B. before | 23.3                     | 20.4                   | 1.2                            | .1                  | .05             | 1.4                   | 21.9                   |
| after       | 28.7                     | 26.6                   | 1.2                            | .31                 | .15             | 1.8                   | 23.7                   |
| D.C. before | 14.9                     | 13.5                   | .62                            | .00                 | .07             | 1.5                   | 32                     |
| after       | 21.4                     | 17.7                   | .9                             | .05                 | .16             | 1.6                   | 27                     |

STUDENT REVIEWERS (cont.)

|       |        | words<br>per<br>sentence | words<br>per<br>T-unit | parallel<br>construc-<br>tions | relative<br>clauses | attrib<br>adjs. | syllables<br>per word | word<br>fre-<br>quency |
|-------|--------|--------------------------|------------------------|--------------------------------|---------------------|-----------------|-----------------------|------------------------|
|       |        | —                        | —                      | —                              | —                   | —               | —                     | —                      |
| A.C.  | before | 23.8                     | 18.4                   | 1.1                            | .18                 | .06             | 1.5                   | 51                     |
|       | after  | 31.2                     | 28.4                   | 1.7                            | .50                 | 00              | 1.8                   | 36.6                   |
| P.G.  | before | 21.8                     | 18.4                   | 1.1                            | .19                 | 00              | 1.2                   | 43.5                   |
|       | after  | 20.6                     | 16.9                   | .4                             | .11                 | 00              | 1.4                   | 37.4                   |
| D.H.  | before | 21.9                     | 16                     | 1.2                            | .21                 | .16             | 1.5                   | 21.8                   |
|       | after  | 28.1                     | 18                     | 1.1                            | .25                 | .06             | 1.7                   | 14.4                   |
| S.K.  | before | 24.5                     | 18.8                   | 1.0                            | .2                  | .2              | 1.6                   | 27.3                   |
|       | after  | 23.7                     | 19.1                   | .65                            | .24                 | .2              | 1.6                   | 23.9                   |
| B.O.  | before | 22.3                     | 18.1                   | .59                            | .23                 | .09             | 1.6                   | 14.3                   |
|       | after  | 26.7                     | 23.4                   | 1.2                            | .36                 | 00              | 1.6                   | 20.8                   |
| L.P.  | before | 17.4                     | 15.2                   | .74                            | .07                 | .07             | 1.4                   | 23.2                   |
|       | after  | 24.5                     | 24.5                   | 1.2                            | .15                 | .23             | 2.1                   | 15.3                   |
| V.P.  | before | 18.6                     | 13.9                   | 1.4                            | .09                 | .03             | 1.5                   | 18.2                   |
|       | after  | 31.2                     | 31.2                   | 2.6                            | .4                  | .05             | 1.6                   | 25.5                   |
| B.R.  | before | 23                       | 19.4                   | 1.1                            | .37                 | .04             | 1.7                   | 22.9                   |
|       | after  | 21.9                     | 18.5                   | .94                            | .31                 | .06             | 1.8                   | 26.3                   |
| D.Ro. | before | 27.2                     | 20.4                   | 1.6                            | .06                 | 00              | 1.3                   | 27.9                   |
|       | after  | 26.3                     | 20.8                   | 1.2                            | .47                 | .05             | 1.4                   | 21.8                   |
| D.Ru. | before | 17.2                     | 14.5                   | .62                            | .13                 | 00              | 1.3                   | 57.1                   |
|       | after  | 23.7                     | 21.8                   | .66                            | .42                 | 00              | 1.2                   | 30.1                   |
| J.S.  | before | 21.3                     | 17.4                   | .83                            | .17                 | .22             | 1.4                   | 31.5                   |
|       | after  | 30.3                     | 28.7                   | .88                            | .5                  | .05             | 1.7                   | 17                     |

STUDENT REVIEWERS (cont.)

|               |        | words<br>per<br>sentence | words<br>per<br>T-unit | parallel<br>construc-<br>tions | relative<br>clauses | attrib<br>adjs. | syllables<br>per word | word<br>fre-<br>quency |
|---------------|--------|--------------------------|------------------------|--------------------------------|---------------------|-----------------|-----------------------|------------------------|
|               |        | —                        | —                      | —                              | —                   | —               | —                     | —                      |
| class average | before | 21.32                    | 17.62                  | 1.0                            | .154                | .076            | 1.45                  | 30.2                   |
|               | after  | 26.02                    | 22.74                  | 1.13                           | .313                | .067            | 1.63                  | 24.56                  |
| S.D.          | before | 3.28                     | 2.30                   | .30                            | .13                 | .09             | .14                   | 12.37                  |
|               | after  | 3.56                     | 4.60                   | .53                            | .14                 | .07             | .22                   | 6.89                   |

STUDENT - PROFESSIONAL COMPARISONS

|   |        |        |        |        |        |       |        |        |
|---|--------|--------|--------|--------|--------|-------|--------|--------|
| prof, ave.                                |        | 26.03  | 19.02  | 1.49   | .31    | .08   | 1.58   | 12.83  |
| class ave. as<br>percent of<br>prof. ave. | before | .82    | .91    | .67    | .50    | .92   | .92    | .42    |
|   | after  | 1.0    | .20    | .76    | + .03  | .81   | + .03  | .52    |
| class ave.<br>as z-score<br>of prof. ave. | before | - 2.74 | - .91  | - 1.4  | - 2.07 | - .11 | - 1.46 | - 4.98 |
|   | after  | 00     | + 1.92 | - 1.03 | + .11  | - .26 | + .56  | - 3.36 |