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CRITICAL FACTORS IN
NEWSPAPER READABILITY

Thesis for the Degree of M. A.
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CRITICAL FACTORS IN NEWSPAPER
READABILITY

From a Study of
The State Journal
Lansing, Michigan

By **Melvin Lostutter**

A THESIS

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PREFACE.

The newspaper is a medium of communication intended, if not always designed, for the masses. It is intended, if not always designed, for hurried reading. Those editing and publishing newspapers and those supplying material for publication have long recognized that the daily journals are often, if not usually, scanned or read without overmuch reflection; that the readership consists of all ages and classes, from the well educated to those with no more schooling than is required for the simplest reading matter; yet the editors, publishers, and press associations have not done enough to make their matter readable within such limits---easily readable for the schooled, readable at all, in many instances, for the unschooled.

It is true that editors have traditionally advised their writers and copyreaders to use "short words and sentences"---thus recognizing the two most critical factors in readability. They have advised it, but they have not always required it. That this is true needs no more documentation than the files of your newspaper. It is no mere whimsy that "your Newspaper" is included in the bibliography appended to this study.

Foreign news, for example, is being written for people with five years more education than the average adult American has, according to a recent Ohio State University study cited by The Quill.¹

1. Vol. 25, No. 1, p. 3, January, 1947.

"The research, directed by Lester Getzloe, showed the average story on foreign events was phrased at a level adapted to a reader with fourteen years' schooling," said The Quill. "The American grownup collectively went to school for less than nine years."

But it is not only foreign reports; Washington news, for another example, presents such hurdles of hard words and abstractions as these to the ill-prepared average reader:

President Truman today called for undeclared war against totalitarian aggression to prevent further collapse of free institutions and further loss of independence in threatened countries...²

And it is not only hard words and abstractions but long, complicated, and overloaded sentences such as this:

Three Chicago men were captured and a fourth escaped yesterday after they were trapped by police in a rooming house in Grand Rapids, Mich., where they were torturing a victim in an effort to find a hoard of \$38,000 and some jewelry reported hidden there last week by one of the ringleaders of a recently disclosed million dollar black market sugar racket...³

Or it may be a combination of hard words and long, complicated sentences, such as this:

Kiernan said the judiciary committee may amend the sewer district measure to give municipalities, firms, corporations or persons the right of appeal from an order of the commission directing them to connect with the sewer project. As the bill is now written, it does not specifically give communities, corporations or persons the right to appeal from orders the commission might give, directing them to connect with the proposed system.⁴

2. Chicago Tribune, March 12, 1947, p. 1.

3. " " " , March 10, 1947, p. 1.

4. Providence Journal, March 11, 1947, p. 1.

These are not atypical examples but the sort of thing that can be found in any edition of most newspapers. Most but not all. For instance, Time⁵ contrasts the readability of the New York Times and the tabloid New York Daily News in reporting the same news item. The Times started it off like this:

President Truman recommended to Congress today a sweeping revision of legislation under which the Executive Branch of the Government has been exercising extraordinary powers pursuant to declarations of a state of emergency by President Roosevelt in 1939 and 1941. This step was foreshadowed in his message to Congress Feb. 3...

The Daily News put it this way:

President Truman today asked Congress to repeal 24 wartime control laws outright and listed 78 others he wanted to be extended or allowed to lapse.

Time noted with sly casualness that the Daily News has nearly four times as many readers as the Times.

There are other newspapers that have seen the light. Following leadership from other fields, they are attempting to set up standards and to measure results. The Time article mentions as one evidence of this Readable News Reports, a service offered by Robert P. Gunning, as having "helped 30 U.S. dailies stop talking over their readers' heads." The magazine lists among Gunning's clients the Louisville Courier-Journal, the Washington Star, and the Wall Street Journal.

The press associations also have become gradually more conscious of readability and the factors entering into it.

The quill article called it "significant that nearly two years ago the UP submitted its report to a similar study and as a result managed to reduce its grade from 16.5 to 11.7." But 11.7 is still nearly high school graduate level:

It is the writer's belief that the newspaper world must recognize the need for readability on the same level as readership; that it must not stop with recognition but must go ahead to set up standards that will attain such a level of readability; and that it must then go the step farther and apply the best available measurements to determine whether this readability has been attained---and is being maintained.

This investigation is an effort, however humble and fumbling, to contribute a little something toward that end.

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CHAPTER I.

The Editor's Problem.

When the newspaper editor awakens to the realization that his publication is not tailored to the measurements of its readership, there are four things he can do; (1) nothing at all; (2) issue rules of thumb to his writers and copyreaders; (3) call in help from outside; (4) himself try to make a more or less scientific approach to his problem.

The rules of thumb are often quite good so far as they go. If the editor does what is usually the most obvious thing and tells his staff to use shorter words and sentences, his common sense is ordering the same general plan of attack that science would. But how short should the words and sentences be to reach the level desired without irritating condescension? And are there other critical factors than length of word and sentence? Are there, for instance, habits and traditions that block the way to newspaper readability? In short, how can the editor tell whether his own devices will do sufficiently, without overdoing, what he feels should be done?

As for calling in outside help, which ordinarily has to be professional to be of much value, most of the editors who need it the most either cannot afford it or think they cannot. Anyway, it is a recurrent necessity. Experience has shown that the improvement which follows professional measurement and in-

struction wears off. After a few months, the writers and copy-readers are doing much as they did before and the professional must be called back. Keeping a newspaper readable is about as much of a job as making it readable in the first place.¹

Several things stand in the way of the fourth choice ---action by the editor on his own behalf. First is lack of information. From talking with Indiana and Michigan editors, the writer has found that many do not know that formulae have been devised for measuring readability with at least some degree of approximation. Of those who do, not all know where to obtain the formulae, which of the measurements are most applicable to the specialized newspaper field, or how to apply them. Other obstacles include lack of time, lack of patience, and the newspaperman's characteristic skepticism of what he considers the theoretical and "fine haired."

In this investigation a former newspaperman takes the newspaperman's approach to the field of readability in an effort to determine the critical factors involved in applying objective measurement to the material of the daily and weekly journal. Selected for study was The State Journal, published daily in Lansing, capital of Michigan and a city of approximately 30,000 population.

For our purpose, The State Journal, with its circulation of 50,496,² may be considered representative of papers of its own size and many much larger and much smaller, because it is

1. "You are right when you say that reporters and copyreaders do tend to slip to old habits. About every three months it is necessary to emphasize the importance of readability."-- Dale Stafford, managing editor, Detroit Free Press.
2. Editor and Publisher 1947 International Year Book.

big enough to have an editorial staff with some variety of background and specialization, yet small enough to take the folksy attitude toward news of the community that is characteristic of the non-metropolitan press of the United States. In addition, investigation disclosed that it was no more conscious of its readability than the average newspaper gives evidence of being. Its operation was geared to habit and precedent, good and bad, in about the same proportions, perhaps, as most papers'. Its writers appeared to have learned their trade in pretty much their own way and to practice it in pretty much their own way. Copyreading was perfunctory insofar as readability was concerned.

One hundred fifty articles written by eighteen regular members of The Journal staff were analyzed. Most of them were taken from the editions of a ten-day period, November 10 to 19, 1946, which means that the locally written editorial content of that period was scrutinized rather closely. A few other stories in the next couple of weeks were added to round out certain categories under investigation. In addition, ten published letters from readers, ten Associated Press stories from The Journal's front pages of November 16 and 19, and ten staff-written articles from the Detroit Free Press of February 12, 1947, were measured for purposes of comparison. The publisher, managing editor, reporters, and copyreaders of The Journal were interviewed, and copy as well as printed matter was examined.

Two formulae were selected for taking the measurements. They are those of Dr. Irving Lorge, of Teachers College, Columbia University, and Dr. Rudolf Flesch, author of The Art of Plain Talk.

Matters investigated may be summarized by these questions which are considered in the chapters following:

1. Which of the formulae so far developed appears to offer the most advantages in measuring newspaper readability?
2. What effect does the reporter's education and experience have on the readability of the stories he writes?
3. Is there a measurable relationship between subject matter and readability?
4. What effect does the newspaper "lead" have on the story's readability score?
5. What effect does the maxim, Names are news, have on newspaper readability?
6. What are some of the easily applied devices of writing and editing for improving readability, their opportunities and limitations?

CHAPTER II.

The Choice of a Measuring Stick.

The prediction of readability requires "calculation by means of an empirical formula relating specific variables of readability to the criterion of readability."¹

The variables that have been used, in various combinations, are aspects of vocabulary, sentence structure and style, and reader interest;² including such measures as:

Vocabulary load---Number of running words; percentage of different words; percentage of different infrequent, uncommon, or hard words; percentage of polysyllabic words; some weighted measure of vocabulary difficulty; vocabulary diversity; number of abstract words; number of affixed morphemes (prefixes, inflectional endings, etc.).

Sentence structure or style---Percentage of prepositional phrases; percentage of indeterminate clauses; number of simple sentences; average sentence length.

Human interest---Number of personal pronouns; number of words expressing human interest; percentage of colorful words; number of words representing fundamental life experiences; number of words usually learned early in life.

The criterion "must be a measure of success that a large number of readers would have" with a given text, and may be obtained "by judgment or by more objective methods of appraisal."³

1. Lorge, Irving. "Predicting Readability." Teachers College Record, Vol. 45, pp. 404-419, March, 1944.

2. Ibid.

3. Ibid.

Criteria that have been developed and tested include passages of graded difficulty from books and magazines, such as the 376 passages in McCall and Crabbs' Standard Test Lessons in Reading and Flesch's 375 test passages from magazines "of five clearly distinguishable levels of difficulty,"⁴ ranging from True Confessions through Reader's Digest to The Yale Review.

In attempting to evaluate existing formulae in their application---particularly their "practical" application---to newspaper material, the writer took into consideration the "19 significant attempts" to measure readability objectively listed by Flesch in 1943.⁵ They are those of Lively and Pressey, 1923; Keboch, 1927; Dolch, 1928; Vogel and Washburne, 1928; Lewerenz, 1929; Johnson, 1930; Patty and Painter, 1931; Brown, 1931; Holland, 1933; McClusky, 1933; Dale and Tyler, 1934; Ojemann, 1934; Lewerenz, 1935; Gray and Leary, 1935; DeLong, 1938; Washburne and Mophett (Vogel), 1938; Morris and Holversen, 1938; Yoakum, 1939, and Lorge, 1939.

Most of the investigations were based on the reading ability of children and were intended for use chiefly in the grade placement of reading matter for children. Even Lorge's comes in this category, although he says his formula "may be used to advantage in estimating the difficulty of silent and oral passages for adults."⁶ The Gray-Leary formula, however, was especially designed for adult reading; so it was used as

4. Flesch, Rudolf. Marks of a Readable Style. Bureau of Publications, Teachers College, Columbia University, N.Y., 1943.

5. Ibid.

6. Op. cit.

the basis of a majority of the experiments conducted by the Readability Laboratory of the American Association of Adult Education, which was established in 1936 and "charged with the task of assembling all that was known about readability, and of putting this knowledge to work by producing a series of experimental non-fiction books for mass consumption."⁷ But the tests of the Gray-Leary formula, as well as those of Lively and Pressey, Patty and Painter, Yoakum, and Washburne and Vogel, proved "disappointing," according to Flesch, who worked in the Laboratory.

The writer came to the conclusion that the formulae of Lorge and Flesch are best adapted to newspaper measurement for these reasons: (1) They are simpler than some of the others; (2) they are more recent and embody the experience of the earlier investigations; and (3) they take adult reading into consideration.

Lorge and Flesch use three predictors; Gray and Leary, on the other hand, used five, with "no appreciable advantage over the simpler three-elements formula" of Lorge.⁸

The predictors used by Lorge are: average sentence length, ratio of prepositional phrases, and ratio of different "hard words," which means all words not on a list of 769 easy words compiled by Dale.⁹

Those used by Flesch are: average sentence length, number of affixed morphemes a hundred words, and number of personal

7. Flesch, op. cit.

8. Ibid.

9. Dale, Edgar. "A Comparison of Two Word Lists." Educational Research Bulletin, Vol. 10, pp. 484-489, December, 1931.

references a hundred words. The personal references include personal names, personal pronouns, and an exclusive list of words such as "wife," "pal," "aunt," et al., denoting close personal relationships.

In applying these two formulae to 303 samples aggregating 32,671 words from 180 newspaper articles, the writer found himself better equipped to evaluate them from the point of view of the newspaper editor than of the scholarly research worker. After years of editing, he could not shake off all the newspaperman's characteristic skepticism, nor could he ignore the elements of time and patience required for an investigation of this sort. But for the purposes of this study that is perhaps just as well. To have more than academic value, newspaper readability measurements must be accepted by newspapermen, and newspapermen will not be uninterested in the time it takes to master the instructions and make the tests or in any implied academic background such as a knowledge of Latin, Greek, and Anglo-Saxon derivatives.

Some practical obstacles are encountered at once in applying the Lorge and Flesch tests to newspaper stories. The first is that the type is so small and the lines so close together that the samples must be copied before the beginner, at least, can work with them at all accurately.

In using the Flesch formula, some system of marking the affixed morphemes must be employed; a running count is likely to be impracticable for the newspaperman, who would have to check some of the affixes and "follow the etymological explanation of a good dictionary," as Flesch suggests---and a "good

dictionary" is a big, more or less stationary dictionary. The lay investigator, rusty on derivatives, either has to go often to such a dictionary or sacrifice accuracy.

Another difficulty is that the layman cannot feel sure he is marking all the affixes Flesch would. This is because the instructions give more leeway than the conscientious investigator cares to have. Flesch provides a list of affixes but appends a note that the list is not exclusive and another note that affixes in proper names are not to be counted "unless the original meaning is preserved," thus injecting judgment factors. However, such latitude need be of less concern to the newspaperman, for whom a reasonable approximation should be sufficient, than to the more scientific researcher, for the number of affixes a hundred words runs high enough that a few errors of omission and commission may be made without materially affecting the score for all "practical" purposes.

After the words, sentences, affixes, and personal references have been counted, the computations for the Flesch score are made quickly and easily because the samples in most cases run exactly 100 words, which makes the ratios immediately apparent, and because a table of values for virtually all possible sentence lengths and ratios of affixes and personal references is furnished with the instructions.

The newspaperman will find the Lorge formula tedious in three respects; marking the hard words, determining how many

of them are different, and making the computations. Marking the words requires constant reference to the accompanying list of 769 "easy words" until the list, or at least its general import, is learned. Determining how many are different involves checking through all those marked and listing them alphabetically. The computations consist of, first, figuring the ratios, since the samples rarely run an even 100 words; multiplying the ratios by the weight given each factor, and, finally, adding these products and a constant. The newspaperman might simplify the task a little if he felt no need for accuracy to four decimal places.

As with Flesch's, Lorge's instructions are not too clear and exclusive.

The writer found that the Lorge measurements took him two to three times as long as Flesch's. After he became familiar with the two, it required about five minutes to get the Flesch score for a 100-word sample, and ten to fifteen minutes for the Lorge.

The Flesch formula yielded a somewhat wider range of grade placement of the material. Scores of the 150 State Journal stories ran from a low of 6.89 to a high of 15.02, with a spread of 8.13, by that formula. By Lorge's, the range was 5.23 to 11.41, and the spread, 6.18.

For another thing, the Lorge scores tended to bunch up within a narrow segment of the extreme range. Half the stories

graded between 8.00 and 8.99 by his formula. The Flesch scores were more widely distributed.

Distribution of Scores by Reading Grades.

Range	Number of Stories	
	Flesch	Large
Under 6.00	0	1
6.00 to 6.99	1	2
7.00 to 7.99	12	36
8.00 to 8.99	26	75
9.00 to 9.99	36	30
10.00 to 10.99	34	5
11.00 to 11.99	20	1
12.00 to 12.99	14	0
13.00 to 13.99	6	0
14.00 to 14.99	0	0
Over 15.00	1	0
Totals	150	150

As may be inferred from the foregoing table, the writer did not find a high correlation between the two systems. The difference in grade placement ran as much as 4.91 on one story, and from 3.00 to 4.91 on twenty-five.

Differences Between Flesch, Large Scores.

Difference	Number of Stories
Less than .50	20
.50 to .99	28
1.00 to 1.49	20
1.50 to 1.99	25
2.00 to 2.49	16
2.50 to 2.99	16
3.00 to 3.99	20
4.00 to 4.91	5
Total	150

Composite scores of the eighteen state Journal writers, shown in a table on page 14, gave a grade placement correlation of R .469.

CHAPTER III.

The Readable Reader.

The State Journal's most readable writers are its readers. They are by the Lorge measurements, that is, and come near to it by Flesch's formula.

Ten letters to the editor, measured according to Lorge, yielded a composite score of 7.47, while only one staff member was as low as 7.48 on ten stories and the staff as a whole averaged 8.34.

By Flesch measurement, two staff writers had ten-story scores of 8.03 and 8.47, while the readers' letters scored 8.62. This was 1.28 under the composite figure for the staff.

The amateurs, as the professionals, have both hard and easy writers. The individual letters showed these ranges: Flesch, 7.71 to 11.42; Lorge, 6.26 to 9.14.

The letters were written by an active and a retired minister, a 'teen-age girl, a landlord, a recently returned war veteran, housewives, householders, and one confirmed writer to the editor. The Journal, so far as could be ascertained, uses no staff-written material in this column.

The individual scores of the letter writers are shown in the following tabulation:

<u>Writer</u>	<u>Score</u>		<u>Writer</u>	<u>Score</u>	
	<u>Flesch</u>	<u>Lorge</u>		<u>Flesch</u>	<u>Lorge</u>
W.E. Brown	7.71	7.45	Mike Riley	9.36	8.18
E.E.S.	8.27	6.26	M.L. Ryder	10.03	9.14
A. Waterer	8.49	7.50	Mrs. Croisant	10.63	7.37
J.F. Stoll	8.60	6.75	Mrs. Johnson	10.76	8.30
G. Johnson	8.92	6.02	E.H. Barrett	11.42	8.18

Ten Associated Press stories from The Journal's front page also had an aggregate readability index higher than that of the readers, although lower than that of the newspaper staff. The AP scored; Flesch, 9.32 (.58 below The Journal); Lorge, 8.01 (.31 below The Journal).

The wire stories;

<u>Guide Line</u>	<u>Score</u>		<u>Guide Line</u>	<u>Score</u>	
	Flesch	Lorge		Flesch	Lorge
EX-Convict	7.42	7.08	Coal Miners	10.31	7.51
Detroit Minister	8.21	7.39	Movie Strike	10.49	8.40
Five Killed	8.28	8.96	Attorney for	10.81	9.26
Walkout	8.30	7.03	New Probe	11.48	8.53
Heavy Snow	8.73	8.30	Soviet Use of	12.28	9.82

The most readable material measures was ten stories from the Detroit Free Press, which scored; Flesch, 8.27; Lorge, 7.99. The range was from 6.97 to 10.71, by Flesch; from 6.73 to 9.33, by Lorge. The material measured included general news stories, sports, society, an editorial, and two columns, general and sports.

The Free Press was chosen for comparison with The State Journal because it is the metropolitan paper published nearest Lansing and because it is obviously edited with an eye to readability.

The Free Press articles and scores;

<u>Guide Line</u>	<u>Score</u>		<u>Guide Line</u>	<u>Score</u>	
	Flesch	Lorge		Flesch	Lorge
Woods and Waters	6.97	6.73	Mother's Murder	8.91	8.71
Town Crier	7.15	7.27	Wolverines	8.97	9.33
Newlyweds	7.53	9.15	As We See It	9.28	7.75
Five Injured	7.64	7.78	New County	10.03	7.84
Brince Saud	8.86	7.86	State Sells	10.71	9.02

CHAPTER IV.

Education for Readability and Unreadability.

The discovery that The State Journal's amateurs were, on the whole, more "readable" than its professionals raised some questions that this investigation did not answer. One is the relation of education and experience to the writing of readable newspaper copy. Interviews with the editors, the writers themselves, and their co-workers, and a study of their individual scores failed to shed much light on this relationship.

A more subjective appraisal of the readers' letters to the editor showed that they were less exact in expression and less coherent. The staff members' work was generally better organized and better written. Yet, measured objectively, the letters were more comprehensible.

It is obvious that certain factors operate in favor of

<u>Readability Ranking of State Journal Writers.</u>								
Writer	Stories	Samples	Flesch		Lorge		Combined	
			Rank	Score	Rank	Score	Rank	
G	10	12	1	8.03	11	8.48	4 5	
A	10	17	2	8.37	1.	7.48	1	
K	10	15	3	8.47	7	8.23	4	
MU	5	9	4	8.72	3	7.86	2	
SL	10	22	5	9.12	4	7.88	3	
SE	10	16	6	9.24	12	8.61	7	
PL	10	14	7	9.26	15	8.78	9	
PA	3	6	8	9.88	2	7.61	4	
H	7	8	9	9.95	18	9.08	11	
MC	6	15	10	10.13	10	8.38	8	
MO	12	20	11	10.17	6	8.48	6	
D	10	20	12	10.28	8	8.24	8	
L	4	6	13	10.45	5	8.04	7	
C	10	17	14	11.00	14	8.69	12	
O	9	15	15	11.28	16	8.84	14	
SA	10	19	16	11.55	9	8.33	10	
R	4	10	17	11.79	13	8.66	13	
B	10	22	18	11.89	17	9.00	15	
Totals	150	263		9.90		8.32		

the person who writes letters to the editor, as opposed to the one who writes copy under the editor's direction. He need be in no hurry. He can rewrite if he wishes. He is under fewer restrictions on diction, structure, and subject matter. The topic he chooses may be assumed to be one in which he has more than passing interest or he would not go to the trouble of writing at all.

On the other hand, he may not have had as much formal education as the average newspaperman and he seldom has had as much writing experience. But---if the newspaperman, with more training, is less readable, is it possible that he has been trained away from readability?

The answer to that question would require an inquiry of greater scope than this. Not only more letters to the editor but more analysis of the letter writers would be needed. Indeed, there would have to be more analysis of professional work and workers than is possible with a newspaper and staff of The State Journal's size---with any one newspaper and staff, perhaps.

Education and Experience of Journal Staff.

Education.

Public Schools--Writers H, L, MO.

High School---A, B, C, D, MU,
PA, R, SA, SL.

College--G, K, MC, O, PL, SE.
Journalism--PL, SE.

Experience.

Less Than Ten Years--B, G, PL.

Two to Ten Years--C, H, K,
MC, MO, O, SL.

More Than Ten Years--A, D,
L, MU, PA, R, SA, SE.

Reference to the two preceding tables shows that SE and PL, the two writers with formal education in journalism, have relatively low readability scores by Flesch, but relatively high by Lorge, and that PL is higher by both formulae than the two other society writers, G and K. MC, who took no college journalism but was reared in a newspaper family, ranks about midway by both formulae.

Of the six with college training, G, K, and PL, of the society department, and SE, who writes principally of books and music, are among the low seven by Flesch but range from seventh to fifteenth by Lorge, reflecting the influence of the personal name factor to be analyzed in Chapter VII. MC, mentioned above, is tenth by both formulae, and O is fifteenth by Flesch, sixteenth by Lorge. These two reporters cover a wide range of subject matter.

The three with only grammar school preparation rank ninth, eleventh, and thirteenth by Flesch; fifth, sixth, and sixteenth by Lorge. Writer H, who was a "dime store" saleswoman when recruited to fill a war-time vacancy, writes principally church, lodge, and other organizational news often containing numerous personal names. Writer MO was an orphan with little schooling when he came to The Journal as a copy boy. He handles police, city hall, fires, crime news, city and county politics. Writer L, who is telegraph editor and does the Sunday editorials, has augmented a public school education by wide reading.

The other members of the staff are high school graduates

and one spent, in addition, a couple of years in study for the priesthood. These rank from second to eighteenth by Flesch, and from first to seventeenth by Lorge. One, Writer A, has the lowest combined rank by the two formulae; another, B, the highest.

When analyzed on the basis of experience, the readability of The Journal's staff falls into no clearer pattern. The writers with two years or less include high and low scorers. So do those with more than ten years in the field. For example, A, with the lowest combined rank, and R, with one of the highest, have both been with the paper twenty years or more.

In only one case does a hobby show possible connection with comprehensibility. Writer D is an aviation enthusiast and flies his own plane. Samples of his work dealing with aviation score lower than his writing as a whole, but these were from an opinionated column, and The Journal's writers do better in such columns, as will be seen in the next chapter.

In short, little traceable relationship between readability and formal education, experience, and special interests was found. These elements are so interwoven with such considerations as subject matter, departmental policy, and individual and traditional outlook that it does not seem possible to isolate the critical factors.

CHAPTER V.

Raw Material.

When the material of this study was classified by types, measurement indicated that its readability was affected by (1) subject matter, and (2) an habitual or conventional approach to certain types. However, there did not seem to be enough possibility of isolating those factors from such others as departmental policy and individual background and writing habits for the results to be too conclusive.

One hundred twenty-two of the 150 stories included in the over-all survey were classified, then measured and ranked by type of material or approach to material, as shown in the tabulation at the bottom of this page. Included are only those categories of writing that seemed to have significance so far as this investigation is concerned. Some do not be-

Material Classified by Types.

Type	Stories	Samples	Flesch		Lorge	
			Score	Rank	Score	Rank
Columns	18	36	8.45	1	7.78	2
Society	29	39	8.48	2	8.51	7
Sports	20	39	8.75	3	7.69	1
Spot News	10	18	9.53	4	8.44	6
Traffic Campaign	5	14	9.97	5	7.85	3
Business	6	9	10.75	6	8.54	8
Editorials	14	25	11.00	7	8.22	4
Speeches, Re- ports on	4	10	11.14	8	8.56	9
Local Government	9	19	11.53	9	8.35	5
Rent Control	7	18	11.93	10	9.13	10
<u>All Stories</u>	<u>150</u>	<u>263</u>	<u>9.90</u>		<u>8.32</u>	

cause they are represented by too few articles in the period studied or because all of one type of writing was done by one man.¹

Noticeably low in the scoring are sports and society. Both deal with rather obvious facts, but departmental policy unquestionably is a factor in their readability. The two men who write sports for The State Journal tend to "tell the story" and let it go at that, while the three women who do society eschew much of the flowery and complicated treatment often noted in other papers. The society editor says she preaches direct and simple writing, but there is not much evidence of such supervision outside her page and sports.

The managing editor, when shown the figures for the individual writers, said he detected the influence of subject matter in the relatively high scores of the reporters covering such fields as business, real estate, politics, city and county governmental activities. However, some of those same reporters had high scores on stories of fires, the lease of a building, the announcement of a speaker, and the announcement that down-town stores would be open at night for Christmas shopping.

In the following table, the scores of four reporters whose work includes writing on various phases of local government may be seen to run higher in that field than generally--higher by the Flesch rating, that is; lower by Lorge's.

1. Actually, one category consists of the work of only one man. It was included for reasons to be explained later.

Comparison of Scores on Local Government and Other Subjects.

Writer	Stories	Samples	Flesch		Lorge	
			Govern- ment	All Types	Govern- ment	All Types
C	1	3	12.04	11.00	8.29	8.69
MO	3	4	11.35	10.17	7.85	8.10
O	3	7	11.98	11.28	8.56	8.84
R	2	5	11.91	11.79	8.56	8.66
Totals	9	19	11.53	10.94	8.35	8.47

No such clear trend is found in the scoring of four reporters of business activities, two of whom are also represented in the preceding table.

Comparison of Scores on Business and Other Subjects.

Writer	Stories	Samples	Flesch		Lorge	
			Business	All Types	Business	All Types
E	3	4	10.75	11.89	8.64	9.00
C	1	1	10.19	11.00	7.85	8.69
MC	1	3	10.59	10.13	8.69	8.38
O	1	1	13.72	11.28	10.04	8.84
Totals	6	9	10.75	11.25	8.54	8.74

Perhaps the best evidence of the effect of subject matter is to be found in an analysis of the "spot news" classification. Here material that is rather elemental is involved---deaths, fires, accidents, police news---and the way four reporters wrote it can be compared directly to the way they handled matter somewhat more subtle. The following table shows that in every case by the Flesch measurement, and in half the cases by the Lorge measurement, the scores for "spot" were lower than the reporters' averages for all types of story.

Comparison of Scores on Spot News and Other Subjects.

Writer	Stories	Samples	Flesch		Lorge	
			Spot News	All Types	Spot News	All Types
C	2	4	10.11	11.00	8.32	8.69
MC	2	5	9.71	10.13	8.85	8.38
MO	5	8	9.03	10.17	8.14	8.10
O	1	1	10.32	11.28	8.13	8.84
Totals	10	18	9.53	10.63	8.44	8.47

In the period covered by this investigation, The Journal was conducting two campaigns bordering on "crusades." One was for traffic safety, the other against OPA rent control. The work of four writers on the traffic situation is measured and compared below.

Comparison of Scores on Traffic Safety and Other Subjects.

Writer	Stories	Samples	Flesch		Lorge	
			Traffic	All Types	Traffic	All Types
C	1	2	12.91	11.00	8.60	8.69
D	1	3	8.47	10.28	6.62	8.24
MC	2	6	10.35	10.13	8.67	8.38
PA	1	3	10.09	9.88	6.93	7.61
Totals	5	14	9.97	10.40	7.85	8.35

One man handled the rent control stories, Reporter B. Although his score for them (11.93, Flesch) ran higher than that for his writing on business and real estate (10.75 Flesch), it could easily have been reduced, as will be shown in Chapter VIII. This raises the question of just how much subject matter can be blamed when a story lacks readability.

It is noteworthy that both classes of writing in which opinion is expressed freely are near the extremes of the read-

ability scale by the Flesch formula and one by Lorge's.

The personally conducted columns are by six writers commenting on such diverse fields as sports, music, aviation, social affairs, and general news. In each case, by both formulae, the writer has a lower score for his column than for his writing as a whole, as shown by the following table.

Comparison of Scores of Columns and Other Material.

Writer	Stories	Samples	Flesch		Lorge	
			Column	All Types	Column	All Types
A	4	8	8.05	8.37	6.97	7.49
D	3	6	9.60	10.28	7.82	8.24
K	2	5	7.91	8.47	7.75	8.23
*MU	5	9	8.72	7.78
PL	1	2	8.09	9.26	8.65	8.78
SE	3	6	8.30	9.24	7.86	8.61
Totals	18	36	8.45	9.07	7.78	8.19

*Writer MU represented only by columns.

The editorials, written by two men not otherwise represented by material in this investigation, have a relatively high index by Flesch, although a run-of-the-paper average by Lorge. Here the influence is obviously not subject matter; the editorials, as the columns, cover a wide range of subjects. It seems rather to be the writer's approach to the matter. Columns are traditionally free and easy, chatty, personal in their relationship between the writer and the reader. The editorial, on the other hand, often follows a tradition of formality and profundity, and the "editorial we" can hardly be considered a "personal reference." But really profound writing is not unlikely to go over the heads of readers with an eighth grade education; specious profundity is

almost sure to.

Evidence that editorials need not be hard reading is contained in the Getzloe report mentioned earlier. It says; "After the foreign correspondents had brought in the news at a 14 level, the editorial writers shed their light on it at a 12 level. That was the average grade of editorials on foreign affairs appearing in 16 different newspapers between July 8 and July 18, 1946."² The ratings ran from 8 for the New York Daily News and Philadelphia Record to 15 for the New York Sun and Herald Tribune. This is a rather clear case of the writer's approach rather than his subject matter governing his readability.

Further evidence of the effect of the approach to material is found in the scores for the reports on speeches published in The State Journal. Subject matter is involved, of course, but there seems to be more to it than that. As will be pointed out in Chapter VIII, the reporter can do nothing about the readability of a direct quotation; the trouble is that he is likely to do less than he can about the indirect quotations. Instead of translating the speaker's words and phrasing into something simpler, he seems rather to adopt unconsciously the speaker's style for passages where he might better use his own. The following table shows the scores of four reports of speeches by as many reporters who handle other

2. The Ohio Newspaper, Ohio State University, Columbus, Ohio, Vol. 28, No. 2, November, 1946.

kinds of assignment. In every case the reporter's score for the speech was higher than that for his work as a whole.

Comparison of Scores on Speeches and Other Subjects.

Writer	Stories	Samples	Flesch		Lorge	
			Speech	All Types	Speech	All Types
D	1	2	11.61	10.28	8.90	8.24
O	1	3	10.90	11.28	8.95	8.84
PL	1	2	12.02	9.26	8.95	8.78
SE	1	3	10.74	9.24	8.83	8.61
Totals	4	10	11.14	10.02	8.86	8.58

CHAPTER VI.

The First Fifty Words Are the Hardest.

It is a newspaper maxim that the "lead," or opening paragraph or two, is the "show window" of the story, intended to intrigue the reader into perusing the rest of it. Mere examination of the typical lead reveals it a badly cluttered show window; measurement shows it to be in many cases the most "unreadable" part of the story.

It is true that the lead has other than strictly show window functions. In most cases it is expected to summarize the story, to give its essential information. Traditionally the summary lead and its variations answer the questions; Who? Where? When? What? and sometimes Why? and How? The journalist makes a plausible argument for this journalistic form. He says these are the questions the reader wants answered and right away. His fault, if it be one, is to try too often to answer them all in one breath. He points out that there is no assurance that all the story as written will get into type in the first place, or that all the type will get into the page forms in the second place; therefore, the essential information must be preserved by putting it in the place least likely to be affected by time and space limitations, which is at the top of the article. But he frequently ignores the fact that his essential information will require no more space in two paragraphs than one. And it can be argued, perhaps

measured, that he will often gain in readership by "opening up" his lead even at the cost of a few details which could have appeared later in the story.

The following may be considered an "overloaded" lead--- overloaded with both words and ideas;

A strengthened and revised national farm program to meet changing conditions and the problem of agricultural surpluses is advocated in a list of resolutions to be acted upon by the Michigan Farm Bureau as it opened its 27th annual two-day meeting at Michigan State college Thursday...¹

It could have been simplified something like this;

A stronger national farm program is urged in a resolution before the Michigan Farm Bureau as it opened its 27th annual meeting at Michigan State college Thursday...

The details not included in the revised first paragraph could then have gone into a second paragraph or later in the story. The revision still answers the same "W's" as the original, and the measurement process is not needed to show that its readability index is considerably lower, since its "average sentence length" is twenty-seven to the original's forty-seven.

In the example below, the lead may be called overloaded or merely too compact. At any rate, a little more "air" circulating among the ideas would have increased their ready comprehensibility;

A request that the city council refuse liquor-by-the-glass licenses to those bars and taverns which have been cited for violations and that no licenses be issued to places located within 500 feet of the entrance to any

1. The State Journal, Lansing, Mich, Nov. 14, 1946, p.1.

factory or "other organizations employing a large number of people" has been sent the city council by the Michigan Temperance Foundation, Inc...²

Whatever its shortcomings, the revision following has some of the diagnostically indicated "air" and its readability "reading" is lower:

A request that the city council refuse licenses to taverns near factories has been made by the Michigan Temperance Foundation, Inc.

No place within 500 feet of the entrance to any factory or "other organizations employing a large number of people" would be licensed.

The Foundation also asked the council to refuse liquor-by-the-glass licenses to bars and taverns which have been cited for violations...

Although the principle of "identification" is well established, its careless application can cause overloading of a lead and loss of readability instead of the intended gain. Consider this example:

Ralph Ingersoll, former editor of PM, author, and World War II liaison officer with Allied commands, stoutly pooh-poohed talk of a probable war with Russia in his lecture in Michigan State college auditorium Tuesday...³

With part of the identification and a couple of other words of doubtful utility removed, the passage reads:

Ralph Ingersoll, former editor of PM, pooh-poohed talk of war with Russia in his lecture in Michigan State college auditorium Tuesday...

While all editors might not agree that the revision, with some of of the identification held out for later use, is an improvement, they would have to concede that the lead is less

2. The State Journal, Dec. 4, 1946, p. 1.

3. " " " , Nov. 13, 1946, p. 4

cluttered and that the readability index, at least, is improved.

Supplementing such subjective appraisals with something more objective, the writer analyzed twenty-four stories from The State Journal and found that all but a few had higher readability indices with their leads than without them.

The decision to study the lead's effect on the story as a whole was made because most leads are much shorter than the 100 words recommended as a sample length in applying the measurement formulae and sorting out leads of measurable length would have tended to overemphasize the long, often "bad" ones.

The twenty-four stories, by fifteen writers, were chosen at random from the longer articles included in the State Journal material under study. Included were "spot" stories, sports, and other general and departmental items that would make the samples as representative as possible of the newspaper's editorial content. The only types of material not included were editorials, opinionated columns, and certain personal and society items that do not have well developed leads as the term is generally used.

The procedure was to count the words, sentences, affixed morphemes, etc., in each lead, then subtract those numbers from the corresponding numbers for the story as a whole. This gave a count for the story without its lead. For example, if the story had two hundred words, six sentences, twenty prepositional phrases, and fifty hard words, and the lead had fifty

words, one sentence, five prepositional phrases, and ten hard words, the story without the lead would have 150 words, five sentences, fifteen prepositional phrases, and forty hard words. The figures representing the original less the lead were computed to give the readability index for comparison with that of the entire story. The results are shown in the table below.

Stories Measured With and Without Leads.

Writer	Story No.	Flesch			Lorge		
		With	Without	Diff.	With	Without	Diff.
A	4	9.04	8.66	.38	7.01	6.80	.21
	6	8.10	7.53	.57	8.02	8.49	*.47
E	11	10.02	9.96	.06	7.97	7.68	.29
	14	13.18	12.48	.70	9.92	9.44	.48
C	26	11.39	12.58	*1.19	8.14	7.90	.24
	30	12.91	12.86	.05	8.60	8.92	*.32
D	34	11.61	12.77	*1.16	8.90	7.63	1.27
	36	10.59	10.32	.27	7.97	7.68	.29
G	43	7.63	7.02	.61	8.00	7.71	.29
	45	8.20	7.68	.52	8.40	7.92	.48
H	57	11.00	10.48	.52	10.82	10.94	*.12
K	64	8.08	7.85	.23	7.55	7.31	.24
MC	72	9.38	9.36	.02	7.20	7.19	.01
	74	9.72	9.50	.22	8.56	8.23	.33
MO	78	8.53	8.07	.46	8.16	7.72	.44
	88	11.90	11.81	.09	7.55	7.01	.54
O	100	11.55	11.32	.23	8.50	8.22	.28
	101	11.67	11.25	.42	8.71	8.05	.66
PA	105	9.38	9.50	*.12	7.97	7.76	.21
PL	109	8.63	7.96	.67	8.21	7.95	.26
R	117	11.40	11.58	*.18	7.86	7.94	*.08
SE	140	10.74	11.08	*.34	8.83	8.67	.16
SL	143	9.05	7.97	1.08	8.38	8.12	.26
	146	9.34	9.20	.14	7.13	7.17	*.04
All 24 Stories		9.95	9.80	.15	8.21	7.89	.32

* Stories that scored higher without leads. All others lower.

It will be noted that in only one case did a story score lower by both formulae without its lead than with it. Four scored higher by Flesch but lower by Lorge; four, vice versa, and fifteen, lower by both. In other words, the leads detracted from the readability of their stories in nearly 80 per cent of the cases by each formula, and in 62.5 per cent by both. The difference in the unquestionable cases ran as high as 1.08 by Flesch and .66 by Lorge.

CHAPTER VII.

"Names Are News."

One of the most revered of newspaper maxims is that "names are news," but the authors of the formulae used in this study do not agree on the effect of personal names. Flesch counts them, along with personal pronouns and certain other words denoting close personal relationships, as "personal references," and provides for each to reduce the score of a story. Lorge makes no provision for them, but since only a few can be construed to be on his list of easy words, each adds to its story's ratio of hard words and increases the score. Thus the two formulae work contrariwise in the measurement of a news story containing more names than normal for them. Newspaper practice means that there must be many such stories in any edition.

Since every name in a story tends to reduce the readability index by the Flesch system and increase it by Lorge's, the more names in a story and the more such stories in an edition, the more the correlation between the formulae will be reduced. Since neither was based on newspaper material, it may be assumed that neither is predicated on material containing as many personal names as found in many newspaper articles, particularly "society" items and certain other types of story in which names are numerous---to say nothing of the "personals."

Obviously, then, we may question the accuracy of one or both in measuring such specialized material or the newspaper as a whole if it uses a higher proportion of names than the material on which the formulae were based.

To investigate the effects of this contrariety between the Flesch personal reference factor and the Lorge hard word factor as applied to the names in newspaper stories, I made hypothetical alterations in ten stories from The State Journal so as to measure them with and without the names contained in the originals. I assumed the substitution of "easy words" without affixed morphemes, and no addition of prepositional phrases, so that all factors would be the same except the personal references and the "hard words" represented by the names. I then measured the altered stories and compared their readability indices with those of the original stories.

While the articles hypothetically altered in this way may be considered artificial, the hypothesis may be justified on the grounds that stories with no personal names do appear in newspapers and that stories are, or could be, written with no higher ratios of affixes, prepositional phrases, or "hard words."

Representing the ten stories, by seven writers, were sixteen samples aggregating 1,600 words for the Flesch test and 1,704 for Lorge's. The stories averaged from two and one-half to seventeen and one-half names a sample, and the

names represented four and one-half to twenty-seven and one-half "hard words" a sample. In the story with the lowest proportion of hypothetically substituted words, the Flesch score was increased by .17 and the Lorge score reduced by .45; in the one with the highest proportion, the Flesch score was increased by 1.16 and the Lorge score reduced by 2.84---an over-all variation of four reading grades from the original versions. Composite scores of the ten altered stories show Flesch .61 higher and Lorge 1.35 lower, a spread of 1.96. (See table below).

Comparison of Stories With and Without Their Names.

Writer, Story No.	Flesch		Lorge	
	Higher		Lower	
MC 74				
Original (2 samples)	9.72		8.56	
Without 7 names	9.89	.17	8.11	.45
MO 78				
Original (2 samples)	8.53		8.16	
Without 8 names	8.80	.27	7.76	.40
PA 104				
Original (1 sample)	9.25		9.07	
Without 7 names	9.71	.46	8.35	.72
G 42				
Original (1 sample)	7.62		8.96	
Without 7 names	8.08	.46	7.85	1.11
PL 107				
Original (1 sample)	7.28		8.89	
Without 7 names	7.74	.46	7.68	1.21
G 45				
Original (2 samples)	8.20		8.40	
Without 16 names	8.73	.53	7.37	1.03
K 63				
Original (2 samples)	7.89		8.08	
Without 17 names	8.51	.62	6.58	1.50
PL 115				
Original (1 sample)	8.70		9.02	
Without 10 names	9.36	.66	7.56	1.46
G 43				
Original (2 samples)	7.63		8.00	
Without 34 names	8.75	1.12	5.64	2.36
H 57				
Original (2 samples)	11.00		10.82	
Without 35 names	12.16	1.16	7.98	2.84

CHAPTER VIII.

What the Editor Can Do About It.

If the editor determines by estimate or measurement that the readability index of his newspaper is too high, obviously he can lower it by shortening sentences, reducing their complexity, and using shorter, more common words that do not stray so far from the "easy word" lists. Whether it will reduce the index further if he uses more personal names will depend, as we have seen, on what formula he uses to measure his results.

That most long sentences in newspapers can be broken up into shorter ones without changing the meaning of a passage or damaging whatever literary style it may have is generally acknowledged by newspapermen, even by those who do not follow the practice faithfully. But just how much does this affect the passage's readability? The following excerpt from a State Journal story will be used for a demonstration;

Lansing property owners are participating in an extensive, although unorganized, "strike" against rent control activities here, it was indicated clearly at the second meeting of the Citizens' protest committee, held Thursday night in the auditorium of the Veterans' Memorial building.

This passive resistance, which began early this year with an unwillingness to convert houses into multiple dwellings, apparently has grown until a substantial number of existing accommodations----possibly numbering in the hundreds----now remain vacant. That this number is on the increase is shown by a letter, read at the meeting, from C. LaVerne Roberts, circuit court commissioner, who says he knows of a dozen cases within the past two weeks of units which

have been vacated and will now remain off the rental market...¹

By Flesch's scoring it has a reading grade level of 15.27; by Lorge's, 10.09

Now take the same passage with no changes except for such alterations in sentence length as could easily have been made by the writer or copyreader;

Lansing property owners are participating in an extensive, although unorganized, "strike" against rent control activities here. This was indicated clearly at the second meeting of the Citizens' protest committee, held Thursday night in the auditorium of the Veterans' Memorial building.

This passive resistance, which began early this year with an unwillingness to convert houses into multiple dwellings, apparently has grown until a substantial number of existing accommodations now remain vacant. These possibly number in the hundreds. That this number is on the increase is shown by a letter read at the meeting. C. Laverne Roberts, circuit court commissioner, wrote that he knows of a dozen cases within the past two weeks of units which have been vacated and will now remain off the rental market...

The Flesch score for the revision is 11.48---3.79 lower; Lorge's is 8.53---1.56 lower

The substitution of easier words is not quite so fruitful, although it yields measurable results even when the text is followed quite religiously. Here is another passage by the same reporter writing on the same general subject;

The campaign by a number of Lansing citizens to force removal of Sig Pollack, area rent director, and Glenn L. Parmalee, rent examiner, appeared to be gaining momentum steadily, according to leaders of the group, who reported Wednesday their telephones have been kept busy by landlords and tenants adding comments to a previously repressed storm of indignation seemingly mounting for months.

Miss M.L. Pritchard, temporary secretary of the group,

1. The State Journal, Lansing, Mich., December 6, 1946, p.1.

said Wednesday that a Mr. Williams, whom she identified as a deputy to Lawrence Farrell, rent control head in Detroit, had assured her by telephone that a representative of the Detroit OPA office would be present at the protest meeting to be held at 7:30 o'clock Thursday evening in the city council chambers...²

This scores: Flesch, 15.43; Lorge, 12.07

With a few of the more obvious word substitutions that the hurried copyreader might easily have made, and only a couple of minor changes in structure necessitated by the substitutions, we have:

The campaign by a number of Lansing persons to remove Sig Pollack, area rent director, and Glenn L. Parmalee, rent examiner, seemed to be gaining ground steadily, according to leaders of the group, who said Wednesday their telephones have been kept busy by landlords and tenants adding comments to a repressed storm of indignation which seems to have been mounting for months.

Miss M. L. Pritchard, acting secretary of the group, said Wednesday that a Mr. Williams, who told her he was a deputy to Lawrence Farrell, rent control head at Detroit, had assured her by telephone that somebody from the Detroit OPA office would be at the protest meeting to be held at 7:30 o'clock Thursday evening in the city council chambers...

The Flesch score is now 14.14---1.19 lower than the original; Lorge, 11.26---.81 lower

In another version that follows, the changes in diction are retained and the two long sentences are broken into four:

The campaign by a number of Lansing persons to remove Sig Pollack, area rent director, and Glenn L. Parmalee, rent examiner, seemed to be gaining ground steadily according to leaders of the group. They said Wednesday their telephones have been kept busy by landlords and tenants adding comments to a repressed storm of indignation which seems to have been mounting for months.

Miss M. L. Pritchard, acting secretary of the group,

2. The State Journal, November 20, 1946, p. 1.

said Wednesday that a Mr. Williams who told her he was a deputy to Lawrence Farrell, rent control head at Detroit, had assured her by telephone that somebody from the Detroit OPA office would be at the protest meeting Thursday night. It will be held at 7:30 o'clock in the city council chambers...

This brings the Flesch score down to 10.86---4.57 reading grades below the original. The Lorge score is reduced to 9.21--a difference of 2.86

The writer wishes it understood that the final version does not necessarily show how he thinks the passage should have been written. It is intended only to show how easily it might have been changed to lower its readability indices by the measurements employed. In order conscientiously to preserve the reporter's meaning, several obvious chances to lower the scores still more were ignored. For example, "rent control head at Detroit" might have been changed to "Detroit rent control head," eliminating a preposition, if the wording used does not imply a distinction; and "assured her by telephone" might have been changed to "telephoned her," eliminating two affixes (while adding one), a preposition, and a hard word. If a more drastic simplification of the story were to be made, it might start off something like this:

The campaign to remove Sig Pollack and Glenn L. Parmelee, rent officials, is gaining steadily, leaders said Wednesday...

The passages analyzed above are in the "very difficult" category but the readability indices of relatively easy stories sometimes can be as readily reduced, as will be seen from the one to follow:

State police Saturday were attempting to locate Oscar Diehl, who is deer hunting in the north, to notify him that his wife, Helen, 38, of 2005 North East street, died unexpectedly of a heart attack at her home early Friday evening.

Mrs. Diehl, who died about 8:25 o'clock had been under a physician's care for some time. Mr. Diehl is traffic manager of the Dail Steel Products company.

Mrs. Diehl was born February 16, 1908, at Morrice, and had been a Lansing resident for 20 years.

In addition to the husband she is survived by two daughters, Virginia and Marjorie...

The passage as it appeared in the paper scores: Flesch, 8.07; Lorge, 8.46

Cautious alterations give this version;

State police Saturday were trying to find Oscar Diehl, who is deer hunting in the north, to tell him that his wife, Helen, 38, of 2005 North East street, died of a heart attack at her home early Friday night.

Mrs. Diehl, who died at 8:25 o'clock, had been under a doctor's care for some time. Mr. Diehl is traffic manager of the Dail Steel Products company.

Mrs. Diehl was born February 16, 1908, at Morrice. She lived in Lansing 20 years.

Surviving are the husband, two daughters, Virginia and Marjorie...

The reading grade levels are now: Flesch, 6.67 (1.40 lower); Lorge, 7.40 (1.06 lower)

The newspaperman often finds his hands tied; he is not always able to do the obvious thing to lower his readability score because he must abide by the terminologies of current and specialized usage, or feels that he must. The story which follows is an example. In it the reporter has accepted the terminology of the organization whose activities he is reporting. He no doubt could have thought of easier words than some employed by the American Legion to designate its officers and describe its activities but, presumably, he did not substitute

"meeting" for "conference," for instance, because "conference" is the Legion's word for it. Nor, presumably for the same reason, did he try to do anything about such words with affixed morphemes as "delegates," "commanders," and "adjutants." However, that does not mean that nothing at all could have been done to simplify the passage, which appeared thus:

Lansing Council of Legion Posts announced Saturday that it will be host December 6, 7 and 8 to approximately 2,000 Legionaires and auxiliary members, at the annual winter conference of the Michigan department of American Legion, to be held at the Hotel Olds.

A council committee is completing arrangements for a program of entertainment. Commander Ruel Perry of the council announced John R. Judd and Bessie Javorski as general chairmen of the conference program.

Delegates will be commanders, adjutants and service officers of the state's 500 Legion posts, and presidents, secretaries and welfare chairmen of 370 auxiliary units, representing 100,000 Legion and 40,000 auxiliary members of the state department...⁴

The story as written and published scores 11.24 by the Flesch formula, 9.27 by Lorge's

A sympathetic revision gives us:

Lansing Council of Legion posts announced Saturday that it will be host December 6, 7 and 8 to about 2,000 Legion men and women at the Hotel Olds.

Council Commander Ruel Perry announced John R. Judd and Bessie Javorski as program chairmen. A committee is arranging entertainment.

Delegates will be commanders, adjutants and service officers of the state's 500 posts, and presidents, secretaries and welfare chairmen of 370 auxiliaries. These represent 100,000 Legion and 40,000 auxiliary members.

The new scores are 8.50 by Flesch (2.74 lower); 8.67 by Lorge, .60 lower.

4. The State Journal, Nov. 10, 1946, p. 30.

Another type of story over which the reporter has limited control is that covering a public address or any other occasion calling for direct quotation. If the speaker is quoted faithfully, he establishes some of the readability factors himself. But he is seldom quoted directly in full, and it is in the indirect quotations that the reporter has a chance to help the readability index of the story as a whole. The following passage from The State Journal illustrates this type of material;

If democracy is to be ingrained among the German people of the American occupation zone, one of the major changes which must be made is establishment of civilian control, declared Prof. Marshal M. Knappen, of the Michigan State college department of history, former lieutenant colonel in American military government in Germany, speaking Tuesday afternoon before the Lansing Lions club at the Hotel Olds.

"West Point graduates are not trained for the diplomatic tasks which our occupation army faces on a larger scale than any previous American force," Professor Knappen commented. "We should have civilian control now in our zone..."⁵

Readability: Flesch, 11.56; Lorge, 9.50

A rewritten version, in which the direct quotation was not changed but a few simplifications in the other parts were made, follows:

If the Germans in the American occupation zone are to learn democracy, one of the main changes which must be made is to give them civilian control, Prof. Marshal M. Knappen said Tuesday. The Michigan State college history teacher and former lieutenant colonel in the American military government in Germany spoke before the Lansing Lions club at the Hotel Olds.

"West Point graduates are not trained for the diplomatic tasks which our occupation army faces on a larger scale than any previous American force," Professor Knappen said. "We should have civilian control now in our zone..."

This reduces the Flesch score by 2.04 to 9.52; the Large score by 1.42 to 8.08

It would be possible to find dozens of such easily alterable passages among those examined in the course of this investigation, or to find thousands in other newspapers, but those quoted may suffice to illustrate the point the writer is trying to make.

Other obstacles to attaining better newspaper readability, such as habit, tradition, time and space limitations, were mentioned earlier. Still another is lack of manpower on many publications. It takes time and thought to write simply; writers and copyreaders hurrying to get many things done before a deadline cannot give enough time or thought to individual stories. Something else is the lack of organization often encountered. The copy desk cannot assume all the responsibility, nor can the writers. There must be a readability policy with supervision to see that it is effectuated.

A journalism instructor fresh from newspaper work tells an experience that illustrates this point. The managing editor of the paper with which he was connected was impressed with the readability of the Chicago Daily News and held it up to his reporters as a model. Our friend started writing short sentences, but the copyreaders would string them together with connectives to make the long ones they were accustomed to running, and the results were sometimes so awkward that he decided it would be better for him just to write his own long sentences.

Either the copyreaders had not been told of the suggested improvement or had not been required to go along with it---and so ended one experiment in newspaper readability.

CHAPTER IX.

A Promising New Formula.

The writer has been privileged to examine a new formula that is being developed by Dr. Edgar Dale, of the Bureau of Educational Research of Ohio State University, and to use it in tentative form in measuring some of the material covered in this survey. The Lorge, Flesch, and Dale measurements will be sent to Dr. Dale for his use in connection with a check of the material of current periodicals.

The results of Dr. Dale's research have not been published, and announcement of the factors and weights assigned them must await completion of experiments now under way. However, it may be said that his formula will have only two factors; that one will be an element of sentence structure, and the other a measure of vocabulary load by means of a new test he has devised.

The formula is reported to have shown a high prediction value in the experiments so far conducted, and when adjusted to current periodicals may prove to be the one best suited to the needs of the newspaperman because of its simplicity, if for no other reason. Its sentence structure factor is as easily figured as that of any of the other systems; its vocabulary factor, as quickly (and more indubitably) as Flesch's, much more quickly than Lorge's. There is no third factor.

Tables to be used as short cuts in making the computations will be supplied with the instructions, and the instructions themselves are somewhat simpler than those of Flesch or Lorge. They are being developed and revised on the basis of questions

and criticism from persons using them for the first time, such as this writer was invited to contribute.

Even though the formula is still in the experimental stage, some of the Dale measurements made in connection with this study should be of interest in comparison with the corresponding Flesch and Lorge measurements. In the following tabulation, the writer has resorted to some interpolation so that the grade placements by Dale might be expressed fractionally, as those by Flesch and Lorge. The figures are given with a final reminder that they are tentative, that they have been tested principally on reading matter for children, and that they have not yet been adjusted to periodicals.

A Comparison of Scores by Three Formulae.

Writer	Stories	Composite Scores			Rank		
		Flesch	Dale	Lorge	Flesch	Dale	Lorge
G	10	8.03	8.92	8.48	1	1	11
A	10	8.37	9.08	7.48	2	2	1
K	10	8.47	9.98	8.23	3	4	7
MU	5	8.72	11.14	7.86	4	8	3
SL	10	9.12	9.20	7.88	5	3	4
SE	10	9.24	10.45	8.61	6	6	12
PL	10	9.26	10.32	8.78	7	5	15
PA	3	9.88	11.52	7.61	8	9	2
H	7	9.95	12.48	9.08	9	14	18
MC	6	10.13	12.26	8.38	10	13	10
MO	12	10.17	11.75	8.48	11	10	8
D	10	10.28	14.52	8.24	12	18	8
L	4	10.45	11.02	8.04	13	7	5
C	10	11.00	11.84	8.69	14	11	12
O	9	11.28	12.98	8.84	15	16	16
SA	10	11.55	12.02	8.33	16	12	10
R	4	11.79	14.07	8.66	17	17	13
B	10	11.89	12.72	9.00	18	15	17
All 18	150	9.90	11.06	8.32			

Readers' Letters	8.62	9.30	7.47
Associated Press	9.32	9.84	8.01
Detroit Free Press	8.27	8.58	7.99

CHAPTER X.

We Get What We Pay For.

The first conclusion to be drawn from this investigation is that if The State Journal is as representative of American journalism as assumed to be, more measurement of the readability of newspapers is needed, both as a preliminary to campaigns for improvement and as a check on the results of the campaigns. The Journal's Flesch rating of 9.90 reading grades puts the paper in his "fairly difficult" category by extrapolation. And it must not be forgotten that this composite score is well below the "very difficult" ratings of some of the writers. Five of the eighteen averaged higher than 11.00.

The second conclusion is that the Flesch formula is the one in current use best adapted to the measurement of newspaper material. It is more definitely based on adult reading matter, is more quickly applied, and gives a wider range of grades. However, Dale's new one gives promise of the same advantages, plus the possibility of others noted in Chapter IX.

The third, closely allied to the second, is that there needs to be more study of the effects of personal names on newspaper readability. Do they constitute a critical factor? If so, have the authors of existing measurement formulae taken this factor into account sufficiently and interpreted it correctly?

The fourth conclusion is that attainment of readability for the newspaper as a whole is a conscious process somewhat independent of the education and experience of the paper's

staff writers. We have seen that the reporter with a college education may write easier copy than one with a grammar school or high school background---but also that he may write harder copy; that the veteran of twenty years' experience may write easier than the newcomer---or harder. The effects of hobbies and writing specialties fall into no clearer pattern.

The fifth conclusion is that the newspaper lead, particularly the summary lead, needs attention and even some modification if more readability is desired. If The State Journal were the exception when it comes to frequent use of long and involved leads, the newspaper world would need be no more concerned with this report than it probably will be. But it is The Free Press that is the exception---it and a relatively few other papers that consistently offer shorter, simpler leads. The practice of trying to answer all the "W's" in one breath has been shown to be unnecessary and may be assumed to rest partly on habits and traditions that have not undergone sufficiently the ordeal of analysis.

Of other factors studied, one that gave some evidence of operating for and against readability was subject matter, as some classifications of material graded lower than others. But even here departmental policy and other considerations were involved. The subject matter factor could not be isolated sufficiently to offer anything conclusive. It might be, perhaps, in a study of broader scope.

Practically every comparison of measurements embodied in this report supports directly or inferentially the maxim that

shorter words and sentences make for increased comprehensibility. The condition imposed by the scientific method---that other factors must be equal---has been met in the examples given in the preceding chapters. It would be met in most cases of practical application of the principle by the copy writer and copyreader, who would simply use the material they had while breaking up their long sentences into shorter ones and substituting shorter words or words in more common usage for others that they felt detracted from the article's readability.

This does not mean, of course, that a choice of words on other bases than length will not contribute to comprehensibility. All short words are not "easy." The word, "norm," is short enough and has no affixes, yet it is highly abstract and could not be confidently expected to appear in the vocabulary of the average American who "went to school for less than nine years." On the other hand, "automobile" has ten letters and two affixes and is essentially quite abstract, yet it suggests something concrete enough to almost any four-year-old American.

Neither does it mean that the comprehensibility of sentences depends altogether on their length. The effects of other structural elements have been measured, as was pointed out in Chapter II, and had been recognized as existing long before they were measured. It simply means that a short sentence is more likely to be readily comprehended than a long one, and

that the shortening process will often remove quite incidentally some other structural obstacle to readability. There was an example in Chapter VIII.

In other words, we may conclude that long words and long sentences are not necessarily disease but are symptoms indicating further diagnosis. When the editor finds forty-word sentences appearing in his newspaper, or such a word as "effervescent" when "bubbling" would do just as well, it is time for him to become suspicious of his product. Suspicion should lead to measurement; measurement, in all probabilities, to action.

We may borrow our final conclusion from the Quill article quoted earlier;

"Good writing is more than knowing the facts before one writes. It means work at the typewriter, too. For writing simply is anything but simple itself. It is usually easier and quicker to grind out a long involved sentence than to recast a situation in shorter, more lucid sentences. So it would appear that the search for news readability involves manpower as well as selection and indoctrination of individual men...Most football bowl competitors spring quite naturally from well-paid coaches allowed to collect large squads with care and generosity. So with the ideally written newspaper. We may get it when we can afford it."

BIBLIOGRAPHY

Anonymous. "What Is a Readable Book?" Publishers Weekly, Vol. 129, pp. 990-991, February 29, 1936.

Brown, Robert. "Vocabularies of History and Reading Text-books." Bulletin of the Department of Elementary School Principals, Vol. 10, pp. 408-411, April 1931.

Bryson, Lyman. "The Textbook of the Future." Elementary English Review, Vol. 14, pp. 55-57, February, 1937.

Bryson, Lyman. "Readability Laboratory." Library Journal, Vol. 61, p. 455. June 1, 1936.

Bryson, Lyman. "What Are Readable Books?" Educational Forum, Vol. 1, pp. 397-402, May, 1937.

Bryson, Lyman. "Readable Books for the People." Publishers Weekly, Vol. 135, pp. 778-779, February 18, 1939.

Buckingham, D. R., and Delch, E. W. A Combined Word List. Ginn & Co., Boston, 1936.

Chicago Tribune, March 10 and 12, 1947.

Clarke, James. "Readability: A Practical Problem." Library Journal, Vol. 66, pp. 383-385, May 1, 1941.

Clarke, James. "Let the People Know." Educational Record, Vol. 22, pp. 552-560, October, 1941.

Cutright, Prudence, Halverson, George P., and Brueckner, L. J. "A Study of One Factor in the Grade Placement of Reading Material." Elementary School Journal, Vol. 29, pp. 284-295, December, 1928.

Dale, Edgar. "A Comparison of Two Word Lists." Educational Research Bulletin, Vol. 10, pp. 484-489, December, 1931.

Dale, Edgar; and Tyler, Ralph W. "A Study of the Factors Influencing the Difficulty of Reading Materials for Adults of Limited Reading Ability." Library Quarterly, Vol. 4, pp. 384-412, July, 1934.

DeLong, Vaughn R. "Primary Promotion by Reading Levels." Elementary School Journal, Vol. 38, pp. 663-671, May, 1938.

Detroit Free Press, February 12, 1947.

Delch, Edward W. "Vocabulary Burden." Journal of Educational Research, Vol. 17, pp. 170-183, March 1928.

Dolch, Edward W. "Sampling of Reading Matter." Journal of Educational Research, Vol. 22, pp. 213-215, October, 1930.

Editorial on Bryson's plan to bring books down to "eighth grade" level of "average American." Saturday Review of Literature, Vol. 13, p. 8, February 22, 1936.

Elliott, Catherine J. "Critical Analysis of the Objective Method of Measuring Reading Difficulty." Pittsburgh Schools, Vol. 15, pp. 201-209, May, 1941.

Flesch, Rudolf F. "What Can You Do About Readability?" Wilson Library Bulletin, Vol. 15, pp. 752-754, May, 1941.

Flesch, R. F. "Readability: A New Approach." Library Journal, Vol. 67, pp. 213-215, March 1, 1942. (A correction appears in the April 1 issue.)

Flesch, R. F. "Estimating the Comprehension Difficulty of Magazine Articles." Journal of General Psychology, Vol. 28, pp. 63-80, January, 1943.

Flesch, R. F. "Readability: A New Yardstick." Library Journal, Vol. 68, pp. 777-778, October, 1943.

Flesch, R. F. "Marks of a Readable Style." Bureau of Publications, Teachers College, Columbia University, New York, 1943. Teachers College Record, Vol. 45, pp. 422-423, March, 1944.

Flesch, R. F. "How Does Your Writing Read?" Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. (5 cents).

Flesch, R. F. "The Art of Plain Talk." Harper & Bros., New York, 1946.

Getslee, Lester. "U.S. Press Does Well in Foreign News Volume, But Less Readable Than 1945." The Ohio Newspaper, Ohio State University, Columbus, Ohio, Vol. 28, No. 2, November, 1946.

Gray, William S. Summary of Investigations Related to Reading. Bibliography of 436 references to published reports on most of the reading investigations made in America and England prior to July, 1924. University of Chicago Press, 1923.

Gray, W. S. Summaries of reading investigations, July 1, 1924, to June 30, 1931. Elementary School Journal, Vols. 26-32, February, 1926, to February, 1932, inclusive.

Gray, W. S. Summaries of reading investigations, July 1, 1931, to June 30, 1945. Journal of Educational Research, Vols. 26-39, February, 1933, to February, 1945, inclusive.

Gray, William S., and Leary, Bernice E. "What Makes a Book Readable." University of Chicago Press, 1935.

Holland, B. F. "The Effect of the Length and Structure of Sentence on the Silent Reading Process." Psychological Bulletin, Vol. 30, pp. 668-669, November, 1933.

Jackman, Mabel E. "The Relation Between Maturity of Content and Simplicity of Style in Selected Books of Fiction." Library Quarterly, Vol. 11, pp. 302-307, July, 1941.

Johnson, George R. "An Objective Method of Determining Reading Difficulty." Journal of Educational Research, Vol. 21, pp. 283-287, April, 1930.

Keboch, F. D. "Variability of Word Difficulty in Five American History Textbooks." Journal of Educational Research, Vol. 15, pp. 22-26, January, 1927.

Kerr, W. A., and Remmers, H. H. "Cultural Value of 100 Representative Magazines." School and Society, Vol. 54, pp. 476-480, 596, November and December, 1941.

Leary, Bernice E. "Determining the Difficulty of Reading Material." School Life, Vol. 23, pp. 275-276, April, 1938.

Leverenz, Alfred S. "Measurement of the Difficulty of Reading Material." Los Angeles Educational Research Bulletin, Vol. 8, pp. 11-16, March, 1929.

Leverenz, A. S. "Objective Measurement of Diverse Types of Reading Materials." Los Angeles Educational Research Bulletin, Vol. 9, pp. 8-11, October, 1929.

Leverenz, A. S. "Vocabulary Grade Placement of Typical Newspaper Content." Los Angeles Educational Research Bulletin, Vol. 10, p. 4, September, 1930.

Leverenz, A. S. "A Vocabulary Grade Placement Formula." Journal of Experimental Education, Vol. 3, p. 236, March, 1935.

Lively, Bertha A., and Pressley, S. L. "A Method of Measuring the Vocabulary Burden of Textbooks." Educational Administration, and Supervision, Vol. 9, pp. 389-398, October, 1923.

Large, Irving. "Predicting Reading Difficulty of Selections for Children." Elementary English Review, Vol. 16, pp. 229-233, October, 1939.

Lorge, Irving. "Predicting Readability." Teachers College Record, Vol. 45, pp. 404-419, March, 1944.

Lorge, Irving, and Blau, Raphael. "Reading Comprehension of Adults." Teachers College Record, Vol. 43, No. 3, pp. 189-196, December, 1941.

McCall, William A., and Crabbs, Lelah M. Standard Test Lessons in Reading, Books II-V. Bureau of Publications, Teachers College, New York, 1926.

McClusky, Howard Y. "A Quantitative Analysis of the Difficulty of Reading Materials." Journal of Educational Research, Vol. 28, pp. 276-282, December, 1934.

Morris, Elizabeth O., and Holversen, Dorothy. Idea Analysis Technique. Unpublished manuscript. Teachers College, N. Y., 1938.

Nolte, Karl F. "Simplification of Vocabulary and Comprehension in Reading." Elementary English Review, Vol. 14, pp. 119-124, 146, April, 1937.

Ojemann, Ralph. "The Reading Ability of Parents and Factors Associated with Reading Difficulty of Parent-Education Materials." Researches in Parent Education, II. University of Iowa Studies in Child Welfare, Vol. 8, pp. 11-32, March 1, 1934.

Patty, W. W., and Painter, W. I. "Improving Our Method of Selecting High School Textbooks." Journal of Educational Research, Vol. 24, pp. 23-32, June, 1941.

Providence Journal, March 11, 1947.

Quill, The. Vol. 25, No. 1, p. 3, January, 1947.

Robinson, James Harvey. The Humanizing of Knowledge. George H. Doran Co., New York, 1923.

State Journal, The. Lansing, Michigan, November and December, 1946.

Thorndike, Edward L. A Teacher's Word Book of 20,000 Words. Bureau of Publications, Teachers College, New York, 1931.

Thorndike, E. L., and Lorge, Irving. A Teacher's Word Book of 30,000 Words. Bureau of Publications, Teachers College, New York, 1943.

Time. Vol. 49, No. 9, p. 71, March 3, 1947.

Vogel, Mabel, and Washburne, Carleton. "An Objective Method of Determining Grade Placement of Children's Reading Material." Elementary School Journal, Vol. 28, pp. 373-381, January, 1928.

Walther, Cyrilla. "The Reading Difficulty of Magazines." School Review, Vol. 51, pp. 100-105, February, 1943.

Washburne, Carleton, and Mopsett, Mabel V. "Grade Placement of Children's Books." Elementary School Journal, Vol. 38, pp. 355-364, January, 1938.

Washburne, Carleton, and Vogel, Mabel. "What Books Fit What Children." School and Society, Vol. 23, pp. 2-24, Jan. 2, 1926.

Washburne, Carleton. "A Scientifically Graded Book List for Children." Teachers Journal and Abstract, Vol. 1, pp. 41-46, January, 1926.

Wert, James E. "A Technique for Determining Levels of Group Reading." Educational Research Bulletin, Vol. 16, pp. 113-121, May 19, 1937.

Witty, Paul A., and LaBrant, Lou L. "Vocabulary and Reading." School and Society, Vol. 31, pp. 268-272, February 22, 1930.

Woody, Clifford. "Intrinsic Difficulties of Certain Reading Materials." Peabody Journal of Education, Vol. 17, pp. 149-160, November, 1939.

Yeakum, Gerard Alan. "A Technique for Determining the Difficulty of Reading Materials." Unpublished study, University of Pittsburgh, 1939.

Your newspaper, any edition.

APPENDIX "A"

Tabulated in this section are the measurements made in this investigation. Included are the figures obtained by computing the several factors of the Flesch and Lorge formulae as applied to each of 180 newspaper articles, to the combined work of each of eighteen State Journal writers, and to the combined work of all the writers.

The first eighteen pages following carry the tables for the individual writers; the next three, the tables for the readers' letters, the Associated Press stories, and the Detroit Free Press articles. The totals and composite scores are collected in another table on the twenty-second page.

Each story is keyed with the serial number assigned to its mounted clipping in Appendix B. To facilitate reference to the clipping, the guide line (first word or two of its headline) is also in the tabulation.

Abbreviations used in the tables are: Afx. or Affx., for affixed morphemes; Per. Ref., personal references; Prep., prepositional; Wds., words.

The expression, Sentences and Words, found in the Flesch columns, refers to the number of sentences and number of words in the passages used to determine average sentence length. These may be longer or shorter than the 100-word passages used to determine the ratios of affixes and personal references.

WRITER "A"

Sports

Stories, 10; Samples, 17.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
1	11-11-46	7	State Sinks	100	7 93	23	1	9.07
2	11-16-46	8	O'Neil	100	7 107	30	8	7.70
3	11-14-46	25	Cagey Coach	100	4 105	30	11	8.98
4	11-10-46	1	U. of M.	300	14 286	100	4	9.04
5	11-12-46	9	Crowd May	100	5 100	41	2	9.44
6	11-15-46	14	State Marg'ette	200	9 214	39	18	8.10
7	11-13-46	13	Sports Grist	200	10 214	61	14	8.81
8	11-19-46	9	" "	200	15 199	54	23	7.02
9	11-14-46	25	" "	200	10 219	66	10	8.98
10	11-15-46	14	" "	200	11 202	49	8	8.03
Totals				1700	89 1739	497	99	8.37

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
1	107	5	13	33	8.00
2	106	7	13	40	8.30
3	105	4	14	31	8.35
4	322	16	31	82	7.01
5	100	5	10	34	7.96
6	207	9	20	69	8.02
7	215	10	23	56	7.30
8	199	14	13	52	6.67
9	218	10	38	56	8.16
10	223	11	26	55	7.08
Totals	1712	91	181	508	7.49

WRITER "B"

Business, Real Estate, Rent Control

Stories, 10; Samples, 22.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score	
11	11-10-46	14	Lumber Yards	200	9	204	93	6	10.02
12	11-10-46	14	Location	100	2	92	48	2	13.37
13	11-10-46	15	New Houses	100	3	94	40	1	10.95
14	11-18-46	1	Start Move	300	7	298	171	20	13.18
15	11-19-46	1	Rent Meet	200	7	223	84	14	10.76
16	11-20-46	1	Landlors Ret.	300	10	340	127	33	13.74
17	11-21-46	1	Flint Rent	200	5	205	101	8	12.73
18	11-22-46	1	Hundreds Pro.	300	10	293	147	12	11.07
19	11-29-46	1	Ask Building	200	5	198	117	6	13.12
20	12- 6-46	1	Landlords In	300	9	316	181	8	12.68
Totals				2200	67	2263	1109	110	11.89

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
11	206	9	25	61	7.97
12	99	3	16	36	9.92
13	117	4	19	34	8.89
14	332	8	38	121	9.92
15	222	7	22	66	8.31
16	340	10	38	111	8.95
17	205	5	24	73	9.76
18	308	10	47	96	9.20
19	198	5	24	66	9.54
20	349	10	41	99	8.63
Totals		71	294	763	9.00

WRITER "C"

Clubs, Deaths, Fires, Court, County, Etc.

Stories, 10; Samples 17.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
21	11-10-46	30	Knappen to	100	5	110	44 6	9.63
22	11-15-46	1	Laundries	100	5	92	56 2	10.19
23	11-16-46	5	seek Hunter	100	4	86	30 14	8.14
24	11-10-46	30	Exchange Club	93	3	93	37 10	10.89
25	11-12-46	1	Study Bares	300	10	325	138 6	12.04
26	11-14-46	1	Water Loss	300	10	324	108 3	11.39
27	11-13-46	1	Hospital Disp.	300	9	321	159 12	12.18
28	11-12-46	1	To Raise Curt.	100	4	102	72 6	12.50
29	11-16-46	1	Argue Legal	100	2	90	45 9	12.58
30	11-16-46	1	Ministers	197	6	209	115 23	12.91
Totals				1690	58	1752	804 91	11.00

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
21	109	5	21	31	8.74
22	126	6	19	33	7.85
23	127	5	13	47	8.69
24	93	3	11	31	8.86
25	325	10	39	86	8.29
26	324	10	38	83	8.14
27	322	10	39	89	8.41
28	102	4	10	43	9.20
29	129	9	15	44	9.79
30	209	6	30	62	8.60
Totals		62	235	549	8.69

WRITER "D"

Aviation, military, general news.

stories, 10; samples, 20.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
31	11-10-46	1	Impressive	100	3 77	42	0	10.39
32	11-11-46	1	Red Arrow	300	8 333	130	8	12.44
33	11-24-46	1	Parents Can	300	16 312	109	34	8.47
34	11-13-46	2	Civilian Con.	200	6 200	102	12	11.61
35	11-17-46	8	Guard Needs	100	3 104	55	2	12.31
36	11-24-46	4	Vets Command	300	13 316	159	15	10.59
37	12- 6-46	1	Wait 2,000	100	3 93	54	1	11.81
38	11-10-46	2	Down Runways	300	13 293	130	20	9.62
39	11-24-46	7	" "	200	9 203	71	5	9.38
40	12- 1-46	21	" "	100	4 103	35	1	9.78
Totals				2000	78 2034	887	98	10.28

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
31	147	4	25	51	10.12
32	335	8	52	98	9.70
33	325	17	29	76	6.62
34	201	6	22	66	8.90
35	104	3	16	44	10.59
36	329	14	45	90	7.97
37	120	4	17	32	8.42
38	318	14	39	90	7.84
39	203	9	23	52	7.41
40	101	4	15	31	8.60
Totals		83	283	630	8.24

WRITER "G"**Society.**

Stories, 10; Samples, 12.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
41	11-14-46	15	Fete Bride	100	4 97	9	19	6.89
42	11-14-46	14	Memorial Art	100	6 97	30	11	7.62
43	11-10-46	23	Hospital Style	200	9 212	42	34	7.63
44	11-15-46	10	Plans for Din.	100	6 106	29	9	7.89
45	11-10-46	20	Mildred Smith	200	10 227	54	25	8.20
46	11-10-46	21	Lansing Couple	100	4 92	27	12	8.28
47	11-11-46	5	Garden Club	100	4 101	29	10	8.84
48	11-15-46	10	Club Has Party	100	4 110	31	8	9.40
49	11-13-46	11	Study Club	100	3 93	38	11	10.13
50	11-14-46	14	Seacoast Miss.	100	4 101	33	7	9.30
Totals				1200	58 1236	322	146	8.03

LORGE

Story No.	Date	Page	Guide Line	Words	Sentences	Prep. Phrases	Hard Words	Score
41				97	4	7	40	8.59
42				97	6	15	38	8.96
43				214	9	15	76	8.00
44				105	6	9	45	8.55
45				227	10	29	75	8.40
46				110	5	12	45	8.96
47				100	4	8	32	7.84
48				109	4	12	48	9.68
49				109	4	12	28	7.71
50				101	4	17	33	9.07
Totals				1269	56	136	460	8.48

WRITER "H"

Clubs, Lodges, Churches.

Stories, 7; Samples, 8.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
51	11-10-46	30	Eagles Set	100	5 92	39	3	9.03
52	11-16-46		Peoples Church	100	4 103	31	5	9.36
53	11-10-46	20	New Hillel	100	4 99	39	4	9.82
54	11-10-46	30	Blue Star	100	4 105	41	8	9.87
55	11-10-46	30	U.C.T.	100	4 106	39	0	10.32
56	11-17-46	28	Club 500	100	3 94	44	5	10.95
57	11-10-46	30	Big Legion	200	5 209	72	35	11.00
Totals				800	29 808	305	60	9.95

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
51	109	6	12	36	7.86
52	100	4	16	30	8.66
53	108	5	14	43	9.08
54	105	4	11	35	8.39
55	106	4	14	33	8.54
56	119	4	17	45	9.61
57	207	5	14	105	10.82
Totals	854	32	98	327	9.08

WRITER "K"

Society.

Stories, 10; Samples, 15.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
58	11-17-46	9	Panhellenic	100	5 95	32	21	8.13
59	11-12-46	7	Oldest Social	100	4 105	56	7	10.92
60	11-16-46	3	Mrs. Atwood	100	5 108	38	11	11.42
61	11-12-46	7	Conference	100	3 92	37	12	9.95
62	11-13-46	11	War Brides	100	4 97	37	3	9.68
63	11-10-46	19	U.M.-State	200	9 199	45	21	7.89
64	11-24-46	9	Gay Round	300	12 258	66	21	8.08
65	11-10-23	23	Marcia Scott	100	5 104	24	8	8.06
66	11-10-46	21	Two Big Events	100	4 98	29	2	9.27
67	12-1-46	13	Lavish Charity	300	16 297	70	18	7.83
Totals				1500	67 1453	434	124	8.47

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
58	126	6	23	49	7.92
59	105	4	12	48	9.84
60	107	5	10	42	8.54
61	113	4	11	52	9.79
62	97	4	11	29	7.99
63	215	9	24	67	8.08
64	334	16	39	92	7.55
65	103	5	12	40	8.74
66	98	4	10	23	7.17
67	317	17	43	99	8.03
Totals		74	184	541	8.23

WRITER "L"

Editorials.

Stories, 4; Samples, 6.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx. Per. Ref.	Score
68	11-17-46	6	They Are Real	100	4 89	35 3	9.28
69	11-24-46	18	There's a Sol.	200	7 165	97 8	10.27
70	11-10-46	10	A Period of	100	4 109	51 5	10.85
71	11-10-46	10	We Can All	200	7 249	76 12	11.05
Totals				600	22 612	259 28	10.45

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
68	127	5	13	27	7.00
69	239	8	33	74	8.82
70	109	4	15	36	8.88
71	249	7	28	62	8.23
Totals	724	27	89	199	8.04

WRITER "MC"

Spot, Schools, Business.

Stories, 6; Samples, 15.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
72	11-10-46	11	Schools	300	17 298	139	9	9.38
73	11-10-46	1	Car Speeds	300	10 271	105	20	9.69
74	11-17-46	1	Boy Killed	200	7 189	72	14	9.72
75	11-17-46	32	Skyrocketing	300	12 313	136	3	10.59
76	11-17-46	1	Carelessness	300	10 300	136	9	11.00
77	11-17-46	28	Noted Educator	100	2 112	57	6	15.02
Totals				1500	58 1483	645	61	10.13

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
72	321	18	36	86	7.20
73	355	12	54	113	9.08
74	217	9	30	70	8.56
75	313	12	45	93	8.69
76	318	11	47	79	8.22
77	111	2	15	43	11.41
Totals	1635	64	227	484	8.38

WRITER "MO"

Police, Fire, City Hall, Politics.

Stories, 12; Samples, 20.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
78	11-14-46	1	Jail Boy	200	6	192	37 36	8.53
79	11-14-46	1	Accidents Kill	200	10	187	74 15	8.65
80	11-15-46	1	Four Hurt	100	4	95	28 8	8.70
81	11-13-46	1	Seek Bond	200	8	184	87 30	9.14
82	11-12-46	1	Two Hurt	100	3	97	28 6	9.98
83	11-13-46	1	Vet and Wife	200	7	209	76 14	10.23
84	11-12-46	1	Program to	100	3	95	44 6	10.93
85	11-11-46	1	Recount Is	200	10	206	107 0	10.44
86	11-13-46	4	City Soon	100	3	94	38 4	10.63
87	11-12-46	1	City Apt	100	3	102	48 3	11.70
88	11-13-46	1	Board Asks	200	6	209	103 10	11.90
89	11-12-46	1	Recount's Cost	300	8	307	137 6	12.19
Totals				2000	71	1997	807 138	10.17

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
78	213	7	22	60	8.16
79	204	11	31	57	7.88
80	110	5	13	35	8.14
81	212	9	27	76	8.76
82	124	4	20	34	8.82
83	233	8	29	68	8.41
84	125	4	15	38	8.62
85	206	10	27	58	7.92
86	107	4	13	26	7.67
87	102	3	12	23	8.99
88	226	7	12	63	7.55
89	333	9	38	79	8.25
Totals	2200	81	259	627	8.10

WRITER "MU"

Columnist.

Stories, 5; Samples, 9.

FLESCH

Story No.	Date	Page	Guide	Line	Words	Sentences and Words	Afx.	Per.	Score	
							Ref.			
90	11-21-46	17	Just	Before	190	14	192	73	17	7.88
91	11-22-46	5	"	"	200	14	206	77	8	8.43
92	11-15-46	17	"	"	200	14	196	87	8	8.66
93	11-14-46	18	"	"	200	8	199	82	14	9.69
94	11-13-46	6	"	"	100	4	96	49	6	10.22
Totals					890	54	889	368	53	8.72

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
90	192	12	24	56	7.33
91	205	14	18	70	7.10
92	212	15	19	77	7.76
93	199	8	24	61	8.17
94	128	5	19	47	9.46
Totals					7.86

WRITER "O"

Spot, Business, Local Government.

Stories, 9; Samples, 15.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
95	11-16-46	3	Sunfield	100	3 93	38	8	10.32
96	11-16-46	1	Light Snow	100	4 110	40	0	10.51
97	11-15-46	4	Moderns	300	10 296	152	26	10.90
98	11-17-46	7	New Landel	200	7 208	98	10	11.06
99	11-13-46	4	Farmers to	100	4 105	52	0	11.11
100	11-15-46	1	City Officials	300	10 319	142	1	11.55
101	12-4 -46	1	Plants Here	200	7 204	114	5	11.67
102	11-12-46	10	Equipment Lack	100	3 103	55	2	12.26
103	11-13-46	4	Stores to Be	100	2 101	44	2	13.72
Totals				1500	50 1539	735	54	11.28

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
95	92	3	16	32	8.14
96	108	4	17	30	8.53
97	319	11	51	96	8.95
98	208	7	21	68	8.51
99	104	4	14	35	8.79
100	319	10	34	97	8.50
101	224	8	25	77	8.71
102	103	3	15	36	9.56
103	101	2	16	27	10.04
Totals	1578	52	209	498	8.84

WRITER "PA"

Sunday News and Features.

stories, 3; Samples, 6.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
104	11-17-46	17	Grand Ledge	100	4	96	40 12	9.25
105	11-17-46	1	Old Grads	200	9	195	70 1	9.38
106	11-10-46	1	Traffic Deaths	300	13	321	126 8	10.09
Totals				600	26	612	236 21	9.88

LORGE

Story No.	Words	Sent- ences	Prep. Phrases	Hard Words	Score
104	104	5	15	40	9.07
105	221	10	34	58	7.97
106	337	14	39	67	6.93
Totals	622	29	88	165	7.61

Society.

Stories, 10; Samples, 14.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
107	11-15-46	11	Sunday Cerem.	100	5 97	19	12	7.28
108	11-14-46	15	Lansing Girl	100	4 102	12	8	7.90
109	11-12-46	7	Fashion Show	200	10 203	61	9	8.63
110	11-12-46	7	Catholic L'gue	100	3 89	28	8	9.50
111	11-15-46	15	Sorority Plans	100	3 90	33	5	10.06
112	11-15-46	10	Adolescence	100	4 108	43	4	10.37
113	11-13-46	8	Junior Red X	200	6 221	80	16	11.23
114	11-11-46	5	M.S.C. Head	199	5 207	77	8	12.02
115	11-15-46	11	Citizenship	100	5 109	37	13	88.70
116	11-10-46	22	They Tell Me	200	11 200	62	18	8.09
Totals				1399	56 1426	452	101	9.26

LORGE

Story No.	Words	Sent-ences	Prep. Phrases	Hard Words	Score
107	97	5	12	3	39 8.89
108	99	4	13		35 8.85
109	203	10	23		70 8.21
110	132	4	19		39 8.96
111	110	4	16		41 9.41
112	108	4	15		36 8.88
113	219	6	22		90 9.88
114	205	5	30		49 8.95
115	108	5	11		46 9.02
116	202	11	26		78 8.65
Totals		58	187	523	8.78

WRITER "R"

Local Government, Politics.

Stories, 4; Samples, 10.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
117	11-20-46	1	Would Unify	300	11 337	156	7	11.40
118	11-14-46	1	Would Alter	300	11 325	169	7	11.88
119	11-22-46	1	City Foes	200	5 210	80	14	11.99
120	12- 4-46	1	Limit Bars	200	4 180	93	5	13.11
Totals				1000	31 1052	498	33	11.79

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
117	331	11	41	88	7.86
118	360	12	47	113	8.78
119	209	5	21	60	8.93
120	243	5	32	61	9.52
Totals	1143	33	141	322	8.66

WRITER "SA"Editorials.

Stories, 10; Samples, 19.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score	
121	11-26-46	4	Peoppes Verd.	200	8	192	95	11	10.16
122	11-27-46	4	Merchant	100	3	89	36	3	10.34
123	11-16-46	3	Promises	200	8	203	97	11	10.41
124	11-15-46	6	Military	200	8	196	105	3	10.77
125	11-12-46	4	Use the Key	200	8	198	104	2	10.79
126	11-21-46	8	What's Joke?	200	7	199	100	2	11.27
127	11-19-46	4	Government	300	10	321	136	4	11.39
128	11-22-46	6	Just Beginning	100	3	103	46	1	11.74
129	11-21-46	8	Out of Bounds	100	3	113	43	0	12.06
130	11-13-46		Cooperation	300	9	351	167	9	12.86
Totals				1900	67	1965	929	46	11.55

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
121	192	8	19	65	8.20
122	130	4	22	37	9.14
123	202	8	14	63	7.73
124	212	9	28	66	8.32
125	198	8	26	61	8.33
126	199	7	26	55	8.27
127	320	10	37	86	8.24
128	103	3	15	30	9.03
129	113	3	20	39	10.26
130	351	9	43	66	7.95
Totals	2020	69	250	568	8.33

WRITER "SE"**Books, Music.**FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per.	Score
							Ref.	
131	11-10-46	16	Musical World	200	12	201	67 24	7.85
132	11-24-46		" "	200	7	183	74 19	9.52
133	11-10-46	16	Musicians Give	100	5	116	31 9	8.77
134	11-11-46	4	Tommy Dorsey	100	4	94	33 10	8.87
135	11-10-46	16	SPEBSQSA	200	9	197	91 2	10.04
136	11-10-46	16	Best Poetry	100	3	85	44 10	10.22
137	11-10-46	16	Children's Bks.	100	3	98	31 5	10.29
138	11-10-46	16	Books	200	10	214	45 22	7.84
139	11-15-46	13	Comedy Is	100	5	106	37 10	8.82
140	11-13-46	4	Ingersoll	300	10	283	146 20	10.74
Totals				1600	68	1577	599 131	9.24

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
131	223	13	23	74	7.71
132	227	8	30	87	9.43
133	116	5	17	44	9.21
134	141	5	18	61	9.89
135	222	10	26	74	8.27
136	127	4	19	43	9.41
137	123	4	22	34	8.71
138	212	10	24	51	7.15
139	106	5	17	38	9.03
140	324	11	46	100	8.83
Totals	1821	75	242	606	8.61

WRITER "SL"

Sports.

Stories, 10; Samples, 22.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score	
141	11-15-46	15	French Tank's	100	5	93	26	3	8.22
142	11-18-46	7	St. Mary's	300	13	297	69	15	8.46
143	11-14-46	25	Reds and Okrs.	300	12	329	73	20	9.05
144	11-16-46	8	Sexton Comp.	300	12	326	76	13	9.23
145	11-15-46	15	Parochials End	100	5	104	37	2	9.29
146	11-16-46	8	Blues see	200	8	196	56	0	9.34
147	11-15-46	14	Red-Quaker	200	7	199	66	13	9.76
148	11-13-46	13	City Brews	200	7	191	69	11	9.76
149	11-12-46	9	Sexton And	200	7	211	53	2	9.92
150	12- 1-46	33	Scoring Bee	300	13	311	73	13	9.49
Totals				2200	89	2257	598	92	9.12

LORGE

story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
141	114	6	13	39	8.10
142	327	14	34	94	7.68
143	327	12	43	96	8.38
144	326	12	42	72	7.56
145	101	5	11	29	8.52
146	235	10	27	52	7.13
147	206	8	24	75	8.84
148	220	8	24	72	8.47
149	234	8	33	61	8.16
150	311	13	33	77	7.32
Totals	2401	96	284	667	7.88

READERS' LETTERS

Letters, 10; Samples, 12.

FLESCH

Story No.	Date	Page	Writer	Words	Sentences and Words	Afx.	Per. Ref.	Score C	
151	11-17-46	6	W.E. Brown	100	6	104	26	8	7.71
152	11-17-46	6	E.E.S.	100	6	111	31	7	8.27
153	11-17-46	6	A. Waterer	200	11	194	69	10	8.49
154	11-17-46	6	J.F. Stoll	100	5	86	41	9	8.60
155	11-17-46	6	G. Johnson	100	7	101	30	8	8.92
156	11-10-46	10	Mike Riley	200	9	223	71	15	9.36
157	11-10-46	10	E.H. Barrett	100	5	104	46	9	11.42
158	11-10-46	10	M.L. Ryder	100	4	113	36	5	10.03
159	11-10-46	10	Mrs. Croisant	100	3	116	25	6	10.63
160	11-10-46	10	Mrs. Johnson	100	3	97	37	3	10.76
Totals				1200	59	1149	412	80	8.62

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
151	104	6	18	23	7.45
152	111	6	8	25	6.26
153	219	12	25	63	7.50
154	118	6	10	29	6.75
155	101	7	12	21	6.03
156	223	9	30	64	8.18
157	104	5	17	29	8.18
158	113	4	16	39	9.14
159	115	3	9	22	7.37
160	97	3	14	23	8.30
Totals	1305	61	159	338	7.47

ASSOCIATED PRESS

Stories, 10; Samples, 16.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences and Words	Afx.	Per. Ref.	Score
161	11-19-46	1	Attorney for	100	3	91	48 9	10.81
162	11-16-46	1	Detroit Min.	100	5	99	35 14	8.21
163	11-19-46	1	Heavy Snow	100	5	93	34 3	8.73
164	11-16-46	1	Movie Strike	100	4	100	49 25	10.49
165	11-16-46	1	Soviet Use of	100	3	102	57 3	12.78
166	11-19-46	1	New Probe	200	7	200	116 10	11.48
167	11-16-46	1	Five Killed	200	11	207	62 15	8.28
168	11-18-46	1	Ex-Convict	200	10	189	61 40	7.42
169	11-20-46	1	Walkout Ranks	200	10	207	58 18	8.30
170	11-16-46	1	Coal Miners	300	11	319	125 22	10.31
Totals				1600	69	1607	645 159	9.32

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
161	123	4	19	40	9.26
162	99	5	12	26	7.39
163	108	6	17	34	8.30
164	100	4	14	30	8.40
165	102	3	11	44	9.82
166	199	7	30	55	8.53
167	203	11	35	72	8.96
168	209	11	17	60	7.08
169	206	10	15	58	7.03
170	319	11	38	77	7.51
Totals		72	208	491	7.99

DETROIT FREE PRESS

Stories, 10; Samples, 12.

FLESCH

Story No.	Date	Page	Guide Line	Words	Sentences	Afx. Words	Per. Ref.	Score
171	2-12-47	1	State Sells	100	4	95	58 7	10.71
172	"	1	New County	100	5	88	57 3	10.03
173	"	1	Five Injured	200	11	204	55 26	7.64
174	"	3	Mother's Murder	100	3	92	22 13	8.91
175	"	1	Prince Saud	100	5	100	33 3	8.86
176	"	6	As We See It	100	5	101	39 3	9.28
177	"	15	Woods, Waters	100	8	101	20 4	6.97
178	"	22	Town Crier	200	14	213	56 29	7.15
179	"	8	Newlyweds	100	5	99	20 10	7.53
180	"	14	Wolverines	100	5	107	36 7	8.27
Totals				1200	65	1200	396 105	8.27

LORGE

Story No.	Words	Sentences	Prep. Phrases	Hard Words	Score
171	114	5	13	46	9.02
172	113	6	13	36	7.84
173	204	11	22	66	7.78
174	129	4	15	40	8.71
175	99	5	9	34	7.86
176	100	5	10	32	7.75
177	100	8	12	25	6.73
178	212	14	28	57	7.27
179	99	5	14	40	9.15
180	106	5	17	41	9.33
Totals	1276	68	153	417	7.99

COMPOSITE FACTORS AND SCORES.

The State Journal.

Writer	Stories	Samples	FLESCH					LORGE				
			Sentences		Per.		SCORE	Sentences		Prep. Phrases	Hard	SCORE
			Words	and Words	Affixes	Ref.		Words	ences			
A	10	17	1700	89 1739	497	99	8.37	1712	91	181	508	7.84
B	10	22	2200	67 2263	1109	110	11.89	2376	71	294	763	9.00
C	10	17	1690	58 1752	804	91	11.00	1866	62	235	579	8.69
D	10	20	2000	78 2034	887	98	10.28	2183	83	283	630	8.24
G	10	12	1200	58 1236	322	146	8.03	1269	56	136	460	8.48
H	7	8	800	29 808	305	60	9.95	854	32	98	327	9.08
K	10	15	1500	67 1453	434	124	8.47	1605	74	184	541	8.23
L	4	6	600	22 612	259	28	10.45	724	27	89	199	8.04
MC	6	15	1500	58 1483	645	61	10.13	1635	64	227	484	8.38
MO	12	20	2000	71 1997	807	138	10.17	2200	81	259	627	8.11
MU	5	9	890	54 889	368	53	8.72	930	54	104	311	7.86
O	9	15	1500	50 1539	735	54	11.28	1578	52	209	498	8.84
PA	3	6	600	26 612	236	21	9.88	622	29	88	165	7.61
PL	10	14	1399	56 1426	452	101	9.26	1483	58	187	523	8.78
R	4	10	1000	31 1052	498	33	11.79	1143	33	141	322	8.66
SA	10	19	1900	67 1965	929	46	11.55	2020	69	250	568	8.33
SE	10	16	1600	68 1577	599	131	9.24	1821	75	242	606	8.61
SL	10	22	2200	89 2257	598	92	9.12	2401	96	284	667	7.88
	150	263	26279	1038 26694	10484	1486	9.90	28422	1107	3491	8778	8.32

Detroit Free Press, Readers' Letters, Associated Press.

FP	10	12	1200	65 1200	396	105	8.27	1276	68	153	417	7.99
RL	10	12	1200	59 1149	412	80	8.62	1305	61	159	338	7.47
AP	10	16	1600	69 1607	645	159	9.32	1668	72	208	491	8.01

APPENDIX "B"

Mounted on the 180 pages following are clippings of the State Journal and Detroit Free Press articles that were studied. Each is keyed with a serial number and the initials assigned its writer, or R.L. for reader's letter, AP for Associated Press, F.P. for Free Press. Each also shows the date and page on which it was published.

In an effort to keep the clippings from piling up any more than could be helped, a standard position for them was avoided rather than attempted. This accounts for the alternating positions of the tabulations accompanying them.

The samples chosen were the same for the Flesch and Lorge formulae, so far as the requirements of the two would permit. The Flesch samples are bracketed in red, the Lorge in blue. The samples run from one to three to the story, depending on its length.

It should be noted that even where a passage of a given length physically will serve as a sample for both Flesch and Lorge, differences in the rules governing their word and sentence counts may cause slight variations in those factors.

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