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IN THE NEWS OF BOCA RATON
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THE PROBLEM OF LONG LEADS IN *THE NEWS* OF BOCA RATON AND SIMILAR-CIRCULATION MICHIGAN NEWSPAPERS

By

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ABSTRACT

THE PROBLEM OF LONG LEADS
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AND SIMILAR-CIRCULATION MICHIGAN NEWSPAPERS

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This thesis explores the decision-making of newspaper writers and editors by looking at story leads. Using sentence-length readability criterion, the too-frequent problem of long leads is noted.

Media giant Knight-Ridder, Inc., is using *The News* of Boca Raton to test innovations in story selection, design, and graphics. But the newspaper's handling of fundamentally-important news leads proves to be just the average of ten Michigan dailies of similar size.

The thesis also compares leads of sports news with conventional news. The results suggest sports writers and sports editors are much more innovative with leads of their news stories.

Some specific examples of ponderous leads are cited from the stories examined. And, suggestions for improvement are offered.

To Mom and Dad

ACKNOWLEDGMENTS

The contemplation, research, analysis and writing of a thesis is a chore. The job is complicated for the author if, like me, he has a full-time job and a family life. But, a few important people prodded me and helped me traverse the obstacle course.

My thesis advisor, Steve Lacy, persuaded me to devote more than a year of free time to this project. He did this by using his dry sense of humor while prodding me. He also lied to me, telling me a completed thesis would make me rich and famous like him. I took the bait. I'm grateful.

Carole Eberly and Todd Simon served on the committee. They spent considerable time reading proposals and rough versions of this work. Their suggestions were helpful and I'm extremely grateful.

My wife Barbara allowed me the time and supplied the encouragement for what proved to be a weighty project. It's one of the many ways I'm beholden to her.

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CHAPTER 1

INTRODUCTION

The reach of American daily newspapers is decreasing. While the United States' population has grown over the last 20 years, circulation has stayed flat. This is a serious problem because daily newspapers rely upon their reach to influence public opinion and garner advertising dollars. There are numerous explanations for this decline. One explanation, which encompasses this study, is that newspapers create obstacles to readership. Specifically, stories are difficult to read and comprehend, which is contrary to the mass-appeal nature of the daily newspaper.[1]

In this era of modifying newspapers to compete in the twenty-first century, much of the emphasis has been on snappy graphics, catchy refers and color photographs.[2] But even after these visual transformations, how accessible is the story to readers? Is the beginning of a news story, the lead, so complex it is difficult to read? This study uses an old-fashioned readability criterion to determine if new-

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[1]Severin, Werner J. and James W. Tankard, Jr. *Communication Theories: Origins, Methods, Uses.* (New York: Longman, 1988), 69, 81-82.

[2]Scott Aiges, ''The New Storytellers,'' *Columbia Journalism Review* 29 (March/April 1991): 36-37; Christiane Brown, ''Newspapers 1890-2001, Phasing in Changes to Avoid Being Phased Out,'' *Byline* 17 (Spring 1991): 12-17; John Morton, ''Seeking the Newspaper of the Future,'' *Washington Journalism Review* 12 (December 1990): 46.

fashioned daily newspapers are paying attention to leads. The stories analyzed are those written and edited by the staff.

The News of Boca Raton, which some consider a prototype for an under-50,000-circulation daily newspaper of the next century, is the axis around which this study spins. *The News* is a special project of Knight-Ridder Inc., newspapers. Seeing the aforementioned newspaper industry trend, Knight-Ridder commissioned extensive research, with particular emphasis on readers age 25 to 43. The 25/43 Project, as it is known, has *The News* as its real-world test site. *The News* underwent sweeping changes in October, 1990. The changes include having more sections than the standard two of most newspapers its size, decreasing the amount of government and crime news while increasing self-help and consumer-oriented news. *The News'* pages are elaborately designed with color photos, color graphics and roundups of national and international news keyed to maps. Some of the 25/43 experiments appearing in *The News*, like indexes to advertisers and news digests on Page 2, have already been adopted by other Knight-Ridder papers.[3]

In this thesis, *The News* is evaluated for the accessibility of its stories. Then it is compared with the

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[3]Sally Deneen, ''Doing the Boca,'' *Columbia Journalism Review* 30 (May/June 1991): 15; Mark Fitzgerald, ''25/43 Project A Reader Success,'' *Editor & Publisher* 26 October 1991: 10, 39.

ten Michigan dailies that are closest to Boca Raton in circulation size. The study is much like one done eight years ago on prestigious metropolitan and national newspapers; that study, by Harry Stapler, looked at the one-sentence/long-sentence phenomenon of news leads.[4]

This study is different in that it evaluates eleven daily newspapers in the under-50,000 circulation category. The Michigan newspapers, which represent eight newspaper companies other than Knight-Ridder, are conventional in that they are generally two-section newspapers with heavy emphasis on local news and sports. Although newspapers in this under-50,000 circulation category may not be as prominent as a big-city daily, they form the backbone of the business and are a more typical American newspaper. Of the 1,586 daily newspapers in the United States, 1,336 fall in the under-50,000 circulation category. This group accounts for 19,636,205 of the 60,687,125 daily circulation of U.S. newspapers, or 32 percent. So, their livelihood is an important indicator of the industry's health.[5]

This study differs from the Stapler study in another way, too. It analyzes sports news leads as well as leads for conventional news stories. Sports stories are

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[4]Harry Stapler, ''The One-Sentence/Long-Sentence Habit of Writing Leads and How It Hurts Readership,'' *Newspaper Research Journal* 5 (Summer 1985): 17-27.

[5]*Editor & Publisher International YearBook 1992*, (New York: Editor & Publisher, 1992), 10, 12.

significant. In most of these newspapers, sports opens up the second, and only other, section of the newspaper. Is the sports department ahead of the newsroom in avoiding the one-sentence, long-sentence lead syndrome? It would indeed be odd if basketball-game stories were less accessible than city-council news.

The results will allow some conclusions about the accessibility of some under-50,000 circulation dailies. The results will also help form a basis of comparison between *The News* and the ten Michigan newspapers.

Most significantly, the results may throw a light on the decision process of writers and editors, who, after all, hold the key to sentence lengths and newspaper readability. As long as newspapers exist, whether they land on the front porch with a thud, or brighten a computer screen with the flick of a toggle switch, they will be composed of stories. Every story will have a beginning: the lead. And the burden on that lead to attract a reader will be as great as ever.[6] That's why writers' and editors' decisions about leads are important today, and why they will be important tomorrow.

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[6]Walter S. Mossberg, ''For Now, the Way To Electronic Papers Goes Through San Jose,'' *Wall Street Journal*, 22 July 1993, B1.

CHAPTER 2

FRAMEWORK

Even before outlining the theoretical framework for this study, a few definitions are necessary to form a basic understanding of the subject matter.

A daily newspaper is one that publishes at least five issues per week. All newspapers in this study publish seven days per week, except the Royal Oak (Mich.) *Daily Tribune*, which is not published Saturdays.

A newspaper story is a piece of writing, at least four paragraphs in length, positioned in the news columns. The lead, the beginning of every news story, for the purposes of this study, is the first paragraph of that story.

When readability is discussed in this thesis, it refers to the ease of understanding or comprehension of writing due to the style of the writing. Style factors are those things that can be counted and are related to grammar and word choice. This study is not concerned with legibility of handwriting/typography, nor is it concerned with reading ease related to pleasantness of writing or interest value. This thesis deals mainly with one readability style criterion: number of words per sentence. Another example of a style criterion, which is mentioned in Chapter 3, is number of affixed morphemes. An affixed

morpheme is a prefix, suffix or inflectional ending of a word. Rudolf Flesch's readability studies are concerned with the number of affixed morphemes because he believed the more affixed morphemes, the more difficult the comprehension. However, the way Flesch measures those affixed morphemes has changed over time.

Readability formulas measure the readability of a piece of writing. The formulas are mathematical equations attributing numerical values to certain style criteria, such as those just mentioned. Readability can be expressed in degree of difficulty or in school grade level.

The Framework

Seven common sense assumptions form the framework of this study. The first is that newspapers can limit readership and subscribership by writing over the heads of some readers. If someone at a eighth-grade reading level cannot understand or easily comprehend news stories, it follows logically that he or she will be discouraged from reading and buying the newspaper. This conflicts with newspapers' general mission, which is to have broad appeal.

The second assumption is that any piece of writing can be evaluated for its readability, specifically the ease with which it can be comprehended. The readability formula will yield a rough determination of the story's or book's readability level. Readability formulas have been around

for most of this century. They enjoyed some popularity, especially in the late 1940s and early 1950s. Readability formulas generally were created by critics of the stodgy writing of the early twentieth century, academics who attempted to take scientific looks at writing, and teachers who wanted to match a textbook, short story or book with the education level of their students.[7] Computers as tools for writing have given readability formulas new life. The home personal computer or the newspaper's mainframe arrive at complex reading-level determinations easily through the push-button application of a formula. Readability formulas are controversial: writers and editors are a largely subjective lot critical of the objectivity of readability formulas. The formulas, for example, ignore the syntactic and semantic structure of sentences.[8] However, readability formulas shouldn't be dismissed. They were a prime mover in improving the wire service and newspaper writing in the early 1950s. Although controversial, readability formulas allow reporters, editors and their critics to look at a piece of writing in a different and more objective way.

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[7]George R. Klare, *The Measurement of Readability*, (Ames, Iowa: Iowa State University Press, 1963); George R. Klare and Byron Buck, *Know Your Reader: The Scientific Approach to Readability*, (New York: Hermitage House, 1954).

[8]Beverly L. Zakaluk and S. Jay Samuels, eds., *Readability: Its Past, Present & Future*. (Newark, Del.: International Reading Association, 1988).

The third assumption is that newspaper reporters and editors are in the habit of writing long lead sentences. The evidence is abundant. Reporters and editors feel compelled by conventional wisdom to answer many of the 5W's (who, what, when, where, why, and how) high in the story, often in the first sentence. This yields long sentences, which are sometimes referred to as ''clothesline leads,'' because so many facts are attached to a sentence like wash to a clothesline. Another reason for the long lead sentence is that summarizing in the first sentence decreases a writer's organizational problems. He or she can jam four ideas in a complex first sentence, rather than determining the proper order of four one-idea sentences. Jamming also helps the writer decrease the chance that some editor will accuse him or her of missing the lead. Although various factors have worked to decrease lead sentence lengths since the early part of the century, long-sentence leads still plague the newspaper business.[9]

The fourth assumption is this general dictate of readability: the longer the sentence, the higher the hurdle a reader must cross. Sentence length and sentence complexity bear a close relationship. Because of this, increasing sentence lengths, measured in words, translate to more difficult reading. A longer sentence would be more

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[9]Severin, 77-79, 85; ''Some Add Shortening to 5-W Recipe,'' *Editor & Publisher*, 22 February 1947, 24; Stapler, 17-27.

difficult to comprehend, because the reader must draw many more associations and relations from the capital letter to the period.[10] Long lead sentences create a barrier that may stop some readers, preventing readership of a story. Although a long lead sentence might be less of a problem for a specialized newspaper like *The Wall Street Journal*, which aims at readers with college degrees, it can be a huge problem for a smaller daily newspaper. The under-50,000 circulation dailies examined in this study are newspapers that, by definition, target a wide educational spectrum of readers within their areas.

The fifth assumption is that the limited literacy of vast groups of Americans is a problem for any mass-circulation periodical. The 1990 U.S. Census notes that of the 159 million people age 25 and over, 38 million have not graduated from high school. About 85 million Americans have a high school diploma or less. In other words, about half the adult population has no formal education beyond high school. Only 32 million people hold a bachlor's degree or higher.[11] A recent study by the U.S. Department of Education and the Educational Testing Service suggests illiteracy may be more widespread than previously thought. ''(R)oughly 90 million Americans over age 16 -- almost half that category's total population -- are, as far as most

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[10]Klare, *Measurement Readability*, 19, 169-171.

[11]U.S. Census, 1990.

workplaces are concerned, basically unfit for employment.''[12]

The sixth assumption is that sports stories and the sports section form an integral part of the newspaper's appeal. ''Some observers think the changing sports section may already deserve a most-valuable-player award for helping to hold the circulation line.''[13] The sports section is certainly important to the dailies in this study. For many, it is the front matter in the second, and only other, section of the newspaper.

The seventh assumption is the most common sense assumption. A readability program isn't necessary to determine the word length of a lead sentence. Reporters and writers can count the words.

To sum up, readability experts do not suggest that a long sentence should never be written. But they do suggest that the average sentence should be in the manageable range. If, on average, lead sentences are considered ponderous, newspaper writers and editors may be working against their goal, which is to draw readers into the story.

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[12]Paul Gray, ''Adding Up The Under-Skilled,'' *Time*, 142, 20 September 1993, 75.

[13]C. David Rambo, ''Sports Coverage Plays A More Vital Role,'' *presstime*, October 1989, 21.

CHAPTER 3

BACKGROUND AND HYPOTHESES

This chapter outlines the research background for this thesis and sets up the hypotheses to be tested. The chapter breaks down readability studies by category: newspaper, wire service, novel, etc. The studies that closely relate to this thesis and which support the hypotheses are listed near the end. These critcal studies represent most periods of this century. Table 1 outlines the readability formulas mentioned in this chapter, to facilitate comprehension. The five hypotheses complete the chapter.

General Newspaper Readability Studies

Melvin Lostutter, in his 1947 study, ran Flesch and Lorge readability formulas on 150 stories in the Lansing (Mich.) *State Journal*. He also ran the formulas on readers' letters to the newspaper, Associated Press wire copy, and ten stories by the Detroit *Free Press* staff. By the Flesch formula, the *State Journal* copy tested at 12th grade level and the Associated Press stories at 11th grade level. The readers' letters yielded the easiest reading in the Lansing *State Journal*, at 9th grade level. The sample of *Free Press* stories came out at mid-8th grade level.

Table 1
Outline of Readability Formulas
(To assist in understanding Chapter 3)

Name Publication	Formula Basics	Comment
Gray and Leary 1935	Cumbersome equation with five variables, one of which is average sentence length.	Gray, Leary, pioneers of thorough readability study.
Flesch 1943 (Early formula)	Average sentence length, number of affixed morphemes and ''abstract'' words.	Later simplified this formula.
Dale and Chall 1948	Average sentence length, percentage of words outside the Dale 3,000 list.	Some scholars, grade-school teachers favor this formula.
Lorge 1948	Average sentence length, number of prepositional phrases, words not on the Dale 769 list.	A less-successful colleague of Flesch.
Flesch 1948	Average sentence length and syllables per 100 words. Can be coupled with an equation measuring ''human interest.''	Probably the most widely used formula.
Gunning 1952	Average sentence length and number of words of three or more syllables.	A popular formula for newspapers and wire services.
Cloze/Bormuth 1953	The piece analyzed is its own comprehension test. Every fifth or seventh word removed. Reader fills in.	Named after the psychological term ''closure.''
Fry 1968	Developed a graph, to speed use, using criterion similar to the Flesch 1948 formula.	Helped speed the use of a formula before personal computers.

Lostutter chided the *State Journal* because the easiest reading was produced by outsiders, the readers' letters. But, based on analyzing his sample, he also made this observation: ''The newspaper lead, particularly the summary lead, needs attention and even some modification if more readability is desired. The practice of trying to answer all the ''W's'' in one breath is unnecessary. It rests partly on habits and traditions that have not undergone sufficiently the ordeal of analysis.''[14]

In his 1948 study, Charles Swanson used two versions -- one with significantly easier readability -- of the same story in an experiment. The newspapers going to one area of campus got one version on page 5 of the student newspaper, the other area received the other version. He then surveyed the students to discover who had read which portions of the story. The easier version attracted more readers and they read more of the story.[15]

Rita Haugh Oates, in her 1988 dissertation, combined a newspaper readership study with a Cloze procedure comprehension test. She found virtually no relationship between reading ease and frequency of content read. However, unlike Swanson's study, Oates' study didn't

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[14]Melvin Lostutter, ''Some Critical Factors of Newspaper Readability,'' *Journalism Quarterly* 24 (December 1947): 313.

[15]Charles Swanson, ''Readability and Readership: A Controlled Experiment,'' *Journalism Quarterly* 25 (March 1948): 339-345.

compare an easier and more difficult article of the same subject matter.[16] So, it is impossible to say that although local news was most difficult to read, yet most read, that it would not be even more widely read if easier to comprehend.

Judee and Michael Burgoon and Miriam Wilkinson completed a readership survey of four newspaper markets, which represented six newspapers. The researchers looked primarily at frequency of readership and satisfaction. The researchers then studied during-survey issues of those newspapers for stylistic factors. Relating the style elements to the survey, using factor analysis, they found ''the newspaper is perceived as more competent/trustworthy when ... ease of reading is higher.''[17] ''It also appears that average sentence length may affect the ease with which the newspaper can be read ...''[18] The researchers suggest lowering readability levels may increase effectiveness, in the 1981 study.

Joseph Fusaro and Willis Conover suggest a newspaper that is too difficult to comprehend damages the goal of

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[16]Rita Haugh Oates, ''Reading Ease as a Factor in Newspaper Readership Research: A New Application of the Cloze Procedure,'' Ph.D. diss., Indiana University, 1988.

[17]Judee K. Burgoon, Michael Burgoon, and Miriam Wilkinson, ''Writing Style as Predictor of Newspaper Readership, Satisfaction and Image,'' *Journalism Quarterly* 58 (Summer 1981): 231.

[18]Ibid.

effectiveness. They used the Fry readability formula to test the comprehension ease of three newspapers. The lead news stories in two of the newspapers tested at the college freshman level.[19]

Using the Dale-Chall readability formula, Taher Razik compared front pages of metropolitan and non-metropolitan newspapers of 1969. He found that metropolitan newspapers were slightly easier to read.[20]

Lawrence Miller, in a 1974 study, suggested that the Bormuth Readability Formula, using Cloze procedure, gave a more accurate estimate of readability than the Flesch formula.[21]

John Bittner and G. Wayne Shamo used four readability formulas to analyze the ''Mini Page,'' a special insert for young readers. The Mini Page tested from 5th to 8th grade reading level in the 1976 study.[22]

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[19]Joseph A Fusaro and Willis M. Conover, ''Readability of Two Tabloid And Two Nontabloid Papers,'' *Journalism Quarterly* 60 (Spring 1983): 142-144.

[20]Taher A. Razik, ''A Study of American Newspaper Readability,'' *The Journal of Communication* 19 (December 1969): 317-324.

[21]Lawrence R. Miller, ''Predictive Powers of the Flesch and Bormuth Readability Formulas,'' *Journalism Quarterly* 51 (Autumn 1974): 508-511.

[22]John G. Bittner and G. Wayne Shamo, ''Readability of the Mini Page,'' *Journalism Quarterly* 54 (Winter 1976): 740-743.

Jerry Johns and Thomas Wheat applied the Fry readability formula to two newspapers. Their 1984 study found the reading level to be 8th grade.[23]

Guido Stempel applied the Flesch readability formula to 21 newspapers for his 1981 study. He found that all fell into the ''difficult'' reading range. ''The overall results of this study are so consistent that they ought not be overlooked,'' Stempel warned.[24]

Ron Smith used the Flesch, Gunning and Dale-Chall formulas to determine the readability of 135 stories from the *Washington Post*, *St. Petersburg Times* and *Orlando Sentinel*. Overall, features-entertainment, national-international and state-local stories graded at 14.22 grade level under Flesch, 11.01 grade level under Dale-Chall and 14.18 grade level under Gunning. ''If the Flesch scores are correct, the content of these three papers is for the most part above the reading level of most Americans.''[25]

These newspaper readability studies generally suggest that newspapers are too difficult to read and that this harms the newspaper's effectiveness. These studies are

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[23]Jerry L. Johns and Thomas E. Wheat, ''Newspaper Readability: Two Crucial Factors,'' *Journal of Reading* 27 (February 1984): 432-434.

[24]Guido H. Stempel III, ''Readability of Six Kinds of Content in Newspapers,'' *Newspaper Research Journal* 3 (October 1981): 32-37.

[25]Ron F. Smith, ''How Consistently Do Readability Tests Measure the Difficulty of Newswriting?'' *Newspaper Research Journal* 5 (Summer 1984): 7.

almost totally of daily newspapers in the above-50,000 circulation range, in contrast to this study.

''Readability'' of Television Programs

The dialogue in a group of thirty-two 1953 television programs was tested by Rudolph Vancura using the Flesch formula. Vancura found that the programs were highly ''readable.''[26]

Michael Liberman looked at the structural elements of dialogue used in eight 1979-80 television shows. Liberman was concerned that the simple language of television hampered the writing ability of teenagers and college students. The average sentence length of the dialogue ranged from 5.64 words per sentence for ''Happy Days'' to 8.64 words per sentence for ''Dukes of Hazzard.'' These are significantly shorter than the average sentence length of most prose.[27]

Readability of Wire Service Stories

Wayne Danielson and Sam Dunn Bryan looked at the readability of 1962-1963 Associated Press wire stories. Their analysis of 413 stories suggested that most hard news

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[26]Rudolph H. Vancura, ''Flesch Readability Formula Applied to Television Programs,'' *Journal of Applied Psychology* 39 (1955): 47-48.

[27]Michael Liberman, ''The Verbal Language of Television,'' *Journal of Reading* 26 (April 1983): 602-609.

stories, such as war, defense, diplomacy, business and economics were written at a more difficult level than sports, crime or human interest stories.[28]

Robert L. Hoskins looked at AP and United Press International copy during a random day in 1972. Using the Flesch readability formula he discovered that 83 percent of AP copy and 94 percent of UPI copy fell in the fairly difficult, difficult or very difficult ranges.[29]

Readability of Magazines

Gilbert Len Fowler Jr. and Edward J. Smith compared the readability of delayed-reward and immediate-reward content in eight 1979-80 issues of *Time* and *Newsweek*. The readability of the magazines was similar. Little relationship was found between reward-type and its readability. Business/economy stories were found to be most difficult to read; sports stories were found to be easiest to read.[30]

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[28]Wayne A Danielson and Sam Dunn Bryan, ''Readability of Wire Stories in Eight News Categories,'' *Journalism Quarterly* 41 (Winter 1964): 105-106.

[29]Robert L. Hoskins, ''A Readability Study of AP and UPI Wire Copy,'' *Journalism Quarterly* 50 (Summer 1973): 360-363.

[30]Gilbert Len Fowler, Jr. and Edward J. Smith, ''Readability of Delayed and Immediate Reward Content in Time and Newsweek,'' *Journalism Quarterly* 59 (Autumn 1982) 431-434, 460.

Readability of Novels vis-a-vis Newspapers

Gilbert Len Fowler, Jr. looked at the readability of newspapers and novels in a 1978 study. In the years randomly selected for study, 1904, 1933 and 1965, the bestselling novels remained consistently readable. The newspapers studied -- the *Chicago Tribune*, *New York Times* and *Memphis Commercial Appeal* -- varied in each period, but were always far less readable via the Flesch formula.[31]

Wayne Danielson and Dominic Lasorsa looked at prose styles of novels in four different periods: 1740-1799, 1800-1859, 1860-1919 and 1920-1979. Then they analyzed each group using four different style elements: average number of words per sentence, percent of words with more than nine letters, percent of rare punctuation and percent of words with apostrophes. Sentence length in words showed the most dramatic, and most linear change. Sentence length averaged 41.5 words in the 1740-1799 period; 15.2 words in the 1920-1979 period.[32]

Danielson and Lasorsa were joined by Dae S. Im for a 1992 study. They found, as in the previous study, that

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[31]Gilbert Len Fowler, Jr., ''The Comparative Readability of Newspapers and Novels,'' Journalism Quarterly 55 (Autumn 1978): 589-592; Gilbert Len Fowler, Jr. and Edward J. Smith, ''Readability of Newspapers and Magazines Over Time,'' *Newspaper Research Journal* 1 (November 1979): 3-8.

[32]Wayne A. Danielson and Dominic L. Lasorsa, ''A New Readability Formula Based on the Stylistic Age of Novels,'' *Journal of Reading* 33 (December 1989): 194-197.

novels became more readable, almost in linear fashion, from 1885 to 1990. The exact opposite was true of newspapers. They became less readable, in a linear fashion, over the same period. The Flesch formula for reading ease was used. The problem with the study was that the newspapers analyzed, and meant to represent daily newspapers, were the *Los Angeles Times* and *New York Times*, which are atypical.[33]

Looking at Lead Sentence Lengths

The Nieman Fellows have charted the length of first sentences in *New York Times* front-page stories since 1930. The results were summed up in a 1975 article by Max Hall. ''*The Times*, after squeezing its opening sentences down to an average of about 21 words in the late 1950s, has allowed them to creep back up to 34 words in 1975,'' Hall wrote. He recorded these numbers: 38.8 words in 1930, 39.0 in 1940, 31.9 in 1950, 23.7 in 1960, 26.0 in 1965, 30.4 in 1970 and 33.8 in 1975.[34]

Although not a readability study, George Gladney's 1992 study discussed how *USA Today* has changed American newspapers. Gladney notes how many content characteristics, such as color, graphics and capsulization, have been

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[33]Wayne A. Danielson, Dominic L. Lasorsa and Dae S. Im, ''Journalists and Novelists: A Study of Diverging Styles,'' *Journalism Quarterly* 69 (Summer 1992): 436-446.

[34]Max Hall, ''Leads Grow Longer,'' *Nieman Reports* 29 (Spring 1975): 32-33.

adopted by the 230 largest-circulation newspapers in America. Disregarding the complexities of the study, one characteristic he cited is that the average lead sentence length in *USA Today* is 21.5 words, which, although long, is far shorter than the mean lead sentence lengths of many metropolitan newspapers.[35]

Studies Directly Related to This Work

William Gray and Bernice Leary surveyed librarians, book publishers and readers in libraries to develop a list of structural elements that affect ease of reading. That survey produced a list of 44 elements, such as average sentence length in words, number of first-, second- and third-person pronouns and percentage of polysyllable words.

Gray and Leary then created an adult reading comprehension test, which was taken by 756 readers who represented the spectrum of reading ability. The test was composed of distinct paragraphs. Readers answered multiple-choice questions following each paragraph. Average sentence length in words had the greatest correlation with difficulty. The second highest correlation was number of words not known to 90 percent of sixth-grade pupils. The researchers used the correlations to establish their eight determinants of difficulty. They are: 1. number of

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[35]George Albert Gladney, ''The McPaper Revolution? USA Today-style innovation at large U.S. dailies,'' *Newspaper Research Journal* 13 (Winter/Spring 1992): 54-71.

different hard words. 2, number of easy words. 3, percentage of mono-syllable words. 4, number of personal pronouns. 5, average sentence length in words. 6, percentage of different words. 7, number of prepositional phrases. 8, percentage of simple sentences.[36]

The researchers found using five of these elements -- number of different hard words, number of personal pronouns, average sentence length in words, percentage of different words and number of prepositional phrases -- created an equally useful index of difficulty. Their index, they said, could be used for books, magazines or newspapers.[37] Gray and Leary's dizzying equation, for obvious reasons, had little use before the age of computers. Rudolf Flesch later discovered, in his own tests at the Readability Laboratory of Teachers College, Columbia University, that the formula's accuracy was shaky. The formula's prediction ability was weakest on difficult adult reading matter.[38] Yet, Gray and Leary's book was the first complete attempt, using techniques of social science, to look at structural readability and suggest how this knowledge could be used by librarians.

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[36]William S. Gray and Bernice E. Leary, *What Makes A Book Readable*, (Chicago: University of Chicago Press, 1935).

[37]Ibid., 197.

[38]Rudolf Flesch, ''Estimating the Comprehension Difficulty of Magazine Articles,'' *The Journal of General Psychology* 28 (1943): 65.

Wilbur Schramm looked specifically at how readers of a 3,000-circulation weekly, of a 10,000-circulation daily and of a 300,000-circulation daily progress through individual news stories. Two-hundred readers of each newspaper were asked, within hours after seeing the newspaper, how far they read into specific stories. The system allowed for 14,652 measurable cases. Among the findings in Schramm's 1947 study was that ''A news story loses readers rapidly in the first few paragraphs.''[39] ''High initial readership is no guarantee that readers will stay longer with the story or read a larger portion of it.'' ... ''Greater stylistic readability (as measured by the Flesch formula) seems to encourage greater depth of reading.''[40]

Rudolf Flesch is probably best known as the author of *Why Johnny Can't Read* and *Why Johnny Still Can't Read*. These books were prime movers in the shift toward phonics as the primary method for teaching reading in American schools. But Flesch's first works as a social scientist revolved around the study of readability. Flesch's affect on the study of readability was huge, and his work also encompassed the readability of newspapers.

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[39]Wilbur Schramm, ''Measuring Another Dimension of Newspaper Readership,'' *Journalism Quarterly* 24 (December 1947): 295.

[40]Ibid., 295.

Flesch was the first to emphasize that readers' comprehension difficulty was caused by the difficulty in understanding relationships among the printed words in a story, article or book. This is the reason for the relative success of his readability formulas and the reason they are still widely used. Vocabulary difficulty, which is still a factor, had previously been the key to most readability formulas.

> The work done by the mind in order to understand what is being read, consists mainly in the establishing of the proper relations between the notions evoked by the printed symbols. ... the arranging of notions. Inherent comprehension difficulty in this sense forces the reader to do a great amount of organization and analytic action of ideas. In order to estimate this type of difficulty it is necessary to use style elements which are relational in character.''[41]

The relational style elements Flesch used in his 1943 study were average sentence length in words, number of affixed morphemes and the number of abstract words. Flesch applied his formula to five groups of magazines, ranked by difficulty. Within the easiest group were *Modern Screen* and *Romantic Story*. The middle group was composed of five issues of *Reader's Digest*. The most difficult group included *Foreign Affairs* and *The Yale Review*.

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[41]Flesch, *Estimating*, 68.

All three of Flesch's criteria increased in value, as they were expected to, by rank of comprehension difficulty. When the same samples of magazines were tested by the Lorge formula, it was ineffective for the more difficult reading material.

> Statistical investigation of various style elements in magazine articles on five levels of increasing comprehension difficulty showed that the number of affixed morphemes (prefixes, suffixes, inflectional endings, etc.) and the number of certain ''abstract'' words are highly intercorrelated variables that can be used to predict difficulty of style. The experimental results also indicated that diversity of vocabulary, as used in previous prediction techniques, becomes less important as a symptom of difficulty where adult reading matter is concerned. Articles in serious, scholarly magazines showed marked differences in style from other, ordinary prose writing, when prefixes, suffixes, inflectional endings, ''abstract'' words and average sentence length were measured.[42]

Flesch, in this 1948 study, introduces his revised formula, which is the one still used. It breaks into two equations. One, reading ease, is composed of average sentence length in words and syllables per 100 words. (Syllables per 100 words is a modification and simplification of counting the number of affixed morphemes.) Equation One is of interest to this study

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[42]Ibid., 78.

because it's the readability measure. Equation Two, human interest, is personal words per 100 words and personal sentences per 100 sentences. Personal words are all nouns with natural gender, all pronouns except neuter pronouns and the words ''people'' and ''folks.'' Personal sentences are: ''Spoken sentences, marked by quotation marks or otherwise; questions, commands, requests, and other sentences directly addressed to the reader; exclamations; and grammatically incomplete sentences whose meaning has to be inferred from the context.''[43] Equation Two has to do with the pleasantness of the writing, not its strict readability as defined at the start of this chapter.

This study is important to the current study because it re-affirms the significance of sentence length as a key element of readability prediction. ''The measurement of sentence length is indirectly a measurement of sentence complexity. ... Sentence complexity, in turn, may again be considered as a measure of abstraction.''[44]

Flesch's book, *The Art of Readable Writing*, is not really a study. The book is a pouring forth of Flesch's accumulated knowledge of writing and readability. The 25th anniversary edition (1974), cited here, has an epilogue to each chapter. In the epilogue Flesch discusses what he

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[43]Rudolf Flesch, ''A New Readability Yardstick,'' *Journal of Applied Psychology* 32 (June 1948): 223.

[44]Ibid., 226.

learned since first publication in 1949. In the epilogue to Chapter 4 he says, ''You can't produce a decent piece of writing without a clear lead, and it's well worth spending some time on working it out before you start writing.''[45]

Flesch wasn't a stay-in-the-library social scientist. He pushed phonics as the proper method to teach reading, to parents and teachers, as was previously mentioned. But before that, during the height of his interest in readability, Flesch was hired by Associated Press to improve its writing. He met and talked with the wire service's writers and editors. And, he was the author of the 1951 *AP Writing Handbook*.[46] ''Readers have the habit of dropping out after they have read the lead,'' he wrote. ''To make them read on, the lead should be even more readable than the rest of the story.''[47]

In the same era that Flesch worked with AP, Robert Gunning created a business designed to improved writing and editing at newspapers and wire services. That business was Readable News Reports. United Press International and many newspapers hired Readable News Reports to work with writers and editors to dump ponderous leads and revitalize stodgy

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[45]Rudolf Flesch, *The Art of Readable Writing*, (New York: Harper & Row, 1974): 47.

[46]Rudolf Flesch. *The AP Writing Handbook*. (New York: The Associated Press, 1951).

[47]Ibid., 7.

copy.[48] After years of working with the media, Gunning wrote *The Technique of Clear Writing*, a book for every adult writer. In it he emphasizes the importance of simple words and short sentences.[49] ''No one prefers writing that contains unnecessary complexity. That goes for college professors as well as for Joe Doaks and the rest of us. The preferred writing is that which delivers the same thought most clearly in the fewest words possible.''[50]

In *The Technique of Clear Writing*, Gunning explains the Gunning Fog Index, his own simple readability formula. Two factors determine the Fog Index, average number of words per sentence and number of words of three syllables or more.

The simplicity and usefulness of the Flesch and Gunning formulas have withstood the test of time. They are returning to fashion due to the growth in computer word-processing software. The software used to create this thesis contains two readability programs: the Flesch Reading Ease formula and the Gunning Fog Index.

A series of studies by the American Press Institute supports the experts who use average sentence length as a factor in readability formulas. API studied and surveyed

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[48]Robert Gunning. ''Gunning Finds Papers Too Hard to Read.'' *Editor & Publisher*, 19 May 1945, 12.

[49]Robert Gunning. *The Technique of Clear Writing*. (New York: McGraw-Hill, 1952).

[50]Ibid., 10.

the habits of newspaper readers. When a story's average sentence length was eight words or less, all readers comprehended the writing, API found. At fifteen words it dropped to ninety percent, at twenty words seventy-five percent, at twenty-five words sixty-two percent and at thirty words forty-eight percent.[51]

Counting the number of words in newspaper leads has been going on as a point of interest for 60 years, but Harry Stapler made it a piece of social science. This thesis most closely resembles Stapler's study. Stapler looked at the same two issues of twelve major newspapers: *Atlanta Constitution, Boston Globe, Chicago Tribune, Christian Science Monitor, Los Angeles Times, Miami Herald, Newsday* (Long Island), *New York Times, Philadelphia Inquirer, St. Petersburg Times, Wall Street Journal* and *Washington Post*. In each issue he analyzed the lead for the first 15 staff-bylined, or obviously staff-produced, stories that were news. He excluded columns, soft features, reviews of entertainment, pieces of opinion and articles in food, fashion or sports sections.

Stapler's study was different than this study in that his concerned itself with large-circulation/prestige newspapers, and it reviewed only two issues of each. His study, published in 1985, was on the verge of being pre-*USA*

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[51]Michael Ryan and James W. Tankard, Jr. *Basic News Reporting*. (Palo Alto, Calif.: Mayfield Publishing, 1977), 82-83.

Today, which is perhaps the reason he didn't include *USA Today*. Stapler found that the mean length of sentences in the lead paragraph was 26.1 words, but 21.7 words in paragraphs 2, 3 and 4. Mean lead sentence length ranged from 35.8 words for the *Washington Post* to 20.5 words for the *Christian Science Monitor*. The *Post* also led in single-sentence lead construction. Ninety-three percent of its lead paragraphs were one sentence. Wrote Stapler: ''...leads in nine of the 12 newspapers had average sentence lengths suitable for a college audience. The *New York Times* and *Wall Street Journal*, each with a high level of college-educated readers, can afford to use longer sentences. But most newspapers should ditch the one-sentence, long-sentence habit.''[52] He recommended one idea to a sentence, a tactic that others espouse ... as shall be shown.

Kevin Catalano mimicked Stapler's study, but with 360 stories from six wire services. Catalano found that *Washington Post* wire service leads averaged 39 words. Associated Press registered at 30 words per sentence; Scripps Howard, at 25.5 words per sentence, was lowest. He also found that AP used one-sentence leads 95 percent of the time. United Press International was lowest at 76.7 percent of one-sentence leads. ''Wire service leads are

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[52]Stapler, 24.

being written in the difficult to very difficult range of readability,'' Catalano concluded.[53]

This study, like that of Stapler and Catalano, will look at the length of lead sentences, measured in words. Unlike their works, however, this thesis will examine leads in staff-produced hard news and sports news stories of under-50,000 circulation daily newspapers. The study will yield comparisons between news and sports, and also give a sense of what under-50,000 circulation newspapers are doing. While the focus is on *The News* of Boca Raton, because of its renown for innovation, all the newspapers will give a glimpse of what's happening in the industry in the 1990s.

Have *The News* of Boca Raton and these ten other under-50,000 circulation newspapers fallen into the one-sentence, long-sentence habit of writing leads? Or, have they bucked the trend and improved their accessibility? Let's examine them.

The study will test these hypotheses:

1. *The News* of Boca Raton's leads fall in the ''difficult'' reading range set by Flesch and Gunning.

Flesch specifically said that newspaper writers should keep their average sentence length ''at not more

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[53]Kevin Catalano, ''On The Wire: How Six News Services are Exceeding Readability Standards,'' *Journalism Quarterly* 67 (Spring 1990): 102.

than 19 words.''[54] Gunning suggested that writers were passing the ''danger line'' at more than 20 words in average sentence length.[55] The first sentence should not be, on average, beyond the bounds of standard reading difficulty.

2. Boca Raton's news leads fall in an easier reading range than a representative group of similar-size Michigan newspapers.

A lot of thinking and planning went into revamping *The News*. But are its leads significantly different than those of the ten, supposedly more ordinary, Michigan dailies? The guess is that they ought to be.

3. Sports leads at *The News* of Boca Raton and the Michigan newspapers fall in an easier reading range than do the news leads.

One might guess that sports writers and sports editors produce copy that is more readable. But are their leads substantially at variance with those written in the newsroom?

4. In all eleven newspapers, the lead is usually composed of more than one sentence.

An exact percentage of one-sentence leads will be determined for each paper. Remember, for this study, as

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[54]Flesch, *Handbook*, 3.

[55]Gunning, *Technique*, 36-38.

with the Stapler and Catalano studies, the lead is defined as the first paragraph.

5. Leads for *The News* of Boca Raton and the Michigan newspapers are longer than other average sentences in the story.

The average lead sentence shouldn't be longer than the average sentence in paragraphs two, three, and four. If it is, it suggests that the long lead sentence syndrome is still at work.

CHAPTER 4

METHODOLOGY

To test the hypotheses, a set of newspapers had to be gathered. The idea was to compare the work at *The News* of Boca Raton, Fla., to a group of similar-circulation newspapers. So, the decision was made to randomly select a constructed week for *The News* and ten other newspapers over a six-month period. Research indicates that a composite week gives a good estimate of all newspapers for a six-month period.[56] Since the study was conducted from Michigan, the ten daily newspapers in Michigan with the closest circulation to *The News* were selected. Garnering specific issues of newspapers in this circulation category can be difficult because the newspapers often don't have elaborate systems for single-copy sales by mail. The Michigan newspapers were chosen so the author, if necessary, could drive to the newspaper plant to collect specific issues. Fortunately, this was only necessary once. In another instance, the author copied a back issue from microfilm at the State of Michigan Library in Lansing. Collecting newspapers for study in the under-50,000 circulation range is not as easy as garnering large,

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[56]Daniel Riffe, Charles F. Aust and Stephen R. Lacy. ''The Effectiveness of Random, Consecutive Day and Constructed Week Sampling in Newspaper Content Analysis.'' *Journalism Quarterly* 70 (Spring 1993): 133-139.

metropolitan newspapers that are available on microfilm at many major libraries.

The composite week was selected by a computer-generated list of random numbers and was derived from the six months beginning Sunday, September 27, 1992, and ending Saturday, March 27, 1993. These random numbers yielded this composite week of newspapers: Sunday, January 24, 1993; Monday, February 15, 1993; Tuesday, November 17, 1992; Wednesday, March 3, 1993; Thursday, February 18, 1993; Friday, November 13, 1992; and Saturday, October 31, 1992.

The newspapers to be used for the study were selected by using circulation figures published in the *1992 Editor & Publisher International Year Book*. *The News* daily circulation, according to *Year Book*, was 22,319. The ten Michigan daily newspapers whose circulation was closest to that were: *Adrian Daily Telegram*, 16,472; *Battle Creek Enquirer*, 28,598; *Holland Sentinel*, 19,356; *Marquette Mining Journal*, 18,601; *Midland Daily News*, 16,462; *Monroe Evening News*, 23,129; *Port Huron Times Herald*, 30,218; *Royal Oak Daily Tribune*, 29,905; *Traverse City Record Eagle*, 26,749; and *Ypsilanti Press*, 15,683.

From the beginning, these ten appeared to be an interesting group of newspapers because they represented eight newspaper publishing companies other than Knight-Ridder, which publishes *The News*. The eight companies are: Thomson, Adrian and Marquette; Gannett, Battle Creek and

Port Huron; Stauffer, Holland; Garden State, Ypsilanti; Ottaway, Traverse City; Adams, Royal Oak; Hearst, Midland; and Monroe Publishing, Monroe.

The author began analyzing the newspapers as they were being collected. A decision was reached to attempt to find four news stories and two sports news stories in each issue of each newspaper. These numbers were arrived at simply because more stories cannot be expected from most issues of newspapers in the under-50,000 category. Four news stories and two sports news stories from each issue would yield 28 news stories and 14 sports news stories per newspaper. The author recognized a few issues might fall short, but only six did. This is another example of why many researchers prefer to do content analysis on over-500,000 circulation metro dailies. The metro dailies have many more story examples available. When Harry Stapler studied the twelve metro dailies, he gathered only two issues of each, and analyzed the first fifteen staff bylined news stories in each. Rarely would one of the ten Michigan papers under analysis yield 15 staff bylines, even combining news and sports stories.

Since one of the newspapers doesn't publish on Saturday, the best the author could hope for was seventy-six issues, times six story samples, or 456 stories to be analyzed. The ultimate result was 450 stories: 304 news stories, 146 sports stories.

The plan was to give priority to the most visible stories, those closest to the front page. So, the selecting of stories began on page A-1 for news stories, the first designated sports page for sports stories. In most of these newspapers, the sports section begins the second section. *The News*, on the other hand, bounced its sports section around in the newspaper during the time of the study, sometimes beginning section B, sometimes beginning section C. For some of these newspapers, the Sunday newspaper is larger, and the sports section opens a section further back.

When determining sentence length, this definition of a sentence was used: A sentence is ...

> each unit of thought that is grammatically independent of another sentence or clause, if its end is marked by a period, question mark, exclamation point, semicolon or colon. Incomplete sentences or sentence fragments are also to be counted as sentences. For example, count as two sentences: What did the minister talk about? Sin. Count as two sentences: The Lord is my shepherd; I shall not want. Count as three sentences: There are two arguments against this plan: 1. It is too expensive. 2. It is impractical. Count as two sentences: Result: Nobody came. But count as one sentence only: He registered, but he did not vote. (Two independent clauses, combined into a compound sentence with only a comma.) Count as one sentence: There were three people present: Mary, Robert, and John. (The words after the colon are not a separate unit of thought.) Count as one sentence: This project is supposed to: (a) provide training; (b) stimulate suggestions. (No part of this is an independent clause. Count such material as one sentence even if it is paragraphed.)

> In dialogue, count the words he said or other speech tags as part of the quoted sentence to which they are attached. For example, count as one sentence: He said: ''I have to go.'' Count also as one sentence: ''That's all very well,'' he replied, showing clearly that he didn't believe a word of what was said.[57]

In order to properly evaluate Hypotheses 2, 3 and 5, which call for comparisons, a test of significance is necessary. Because the sample drawn from the population is less than 30 in some cases, Student's t-test is the appropriate test. The t-test is used to determine if two samples came from different populations or the same population. T-tests compare the means of each sample. What's desirous mathematically is to discover that in 95 cases out of 100, the difference between the means exists in the total population, not just in the sample the researcher has drawn.

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[57]Rudolf Flesch. *How to Test Readability*. New York: Harper & Brothers, 1951.

CHAPTER 5

RESULTS

The 450 stories examined in the eleven, under-50,000 circulation daily newspapers were revealing. These newspapers were less frequently guilty of the ponderous leads that Stapler found in many prestigious metropolitan dailies. However, the eleven newspapers studied here too frequently traveled outside the readability ranges recommended by experts like Rudolf Flesch and Robert Gunning.

Means for news story lead sentences ranged from 17.3 words for the *Battle Creek Enquirer* to 25.0 words for the *Ypsilanti Press*. Boca Raton fell in the middle of that range at 21.0 words. Stapler's group of twelve newspapers ranged from the *Christian Science Monitor*, at 20.5 words, to the *Washington Post*, at 35.8 words.

The performance of our small-town dailies is a problem, however. The *New York Times* can claim that it is written for the people most literate in English. Because its specialized audience is so intelligent, writing complexity is of minor importance. On the other hand, daily newspapers like the *Adrian Daily Telegram, Marquette Mining Journal,* and *Monroe Evening News* cannot forward that argument. They seek to attract as many readers as possible

in their circulation areas. The results of this study suggest they are working against their best interests.

The same is true for *The News* of Boca Raton, Fla. It aims to show the way into the next century for daily newspapers, particularly those in its circulation class. Knight-Ridder is trying to make the newspaper more colorful and snappier, as a way to increase its attractiveness and readership. Accessibility is a part of that equation. However, *The News* leads proved to be much like those of the less-innovative Michigan newspapers. In articles about *The News* and its reformation, it is described as editing intensive and ''re-inventing the newspaper.''[58] These results do not show that.

Perhaps this study's most interesting finding regards sports news leads. Sports writers usually do not step into the summary lead syndrome. Sports leads were shorter. And, sports writers and sports editors use substantial variety in their leads. Their work differs from that of the newsroom.

Here are the results, by hypothesis.

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[58]Morton, *Seeking* , 46.

Hypotheses

Hypothesis Number One: *The News* of Boca Raton's leads fall in the ''difficult'' reading range set by Flesch and Gunning.

They do indeed. At 21.0 average words per news lead sentence, and at 21.4 words per sports lead sentence, Boca Raton falls over the recommendation of a 19-word average sentence length by Rudolf Flesch and 20-word average sentence length by Robert Gunning. (See Table 2.)

Table 2

Length of Lead Sentences in *The News* of Boca Raton

	Mean	Standard Deviation	Number of Examples
All Leads	21.1 words	8.3	41
News Only	21.0 words	8.6	28
Sports Only	21.4 words	8.0	13

Most surprising, perhaps, is that this places Boca Raton in sixth position when ranking news lead lengths with the Michigan newspapers. And fifth position when ranking sports news lead lengths (See Tables 3 and 4.) The large values for the standard deviation suggest sentences in Boca Raton's leads are wide ranging, but that doesn't excuse the troublingly high averages.

The Chapter 6 discussion will show that leads of *The News* exhibit the same problems of complexity and ambiguity as do the Michigan newspapers.

Hypothesis Number Two: Boca Raton's news leads fall in an easier reading range than a representative group of similar-size Michigan newspapers.

Not so. The mean sentence length for the Boca Raton newspaper, at 21.0 words, is very close to that of the Michigan newspapers, at 21.5 words. A t-test showed no statistical difference between the means. (See Table 5.) Both are over the standard of 19 by Flesch and 20 by Gunning. However, *The News* figures do suggest much more variation in the length of its lead sentences. The standard error for Boca Raton is 1.62. It is 0.47 for the ten Michigan newspapers. Table 6 shows that the Boca Raton newspaper uses more variation in its lead sentence lengths than most of the Michigan newspapers. This only supports the idea that *The News* has no policy with regard to lead lengths.

Table 3
News Story Leads

Newspaper Publishing Company	Mean length, in words of sentences in graf 1	Mean length, in words, of sentences in grafs 2-4	Differences in lead-sentence mean and mean of graf 2-4 sentences
1. Ypsilanti Press Garden State	25.0	19.1	+5.9
2. Monroe Evening News Monroe Publishing	24.3	18.7	+5.6
3. Marquette MiningJournal Thomson	24.0	20.2	+3.8
4. Traverse City R-Eagle Ottaway	22.9	19.3	+3.6
5. Holland Sentinel Stauffer	21.8	20.8	+1.0
6. News of Boca Raton Knight-Ridder	**21.0**	**19.8**	**+1.0**
7. Midland Daily News Hearst	20.7	18.5	+2.2
8. Royal Oak Daily Tribune Adams	19.9	18.7	+1.2
9. Adrian Daily Telegram Thomson	19.7	19.8	-0.1
10. Port Huron Times Herald Gannett	19.2	19.1	+0.1
11. Battle Creek Enquirer Gannett	17.3	19.0	-1.7

Table 4
Sports Story Leads

Newspaper Publishing Company	Mean length, in words of sentences in graf 1	Mean length, in words, of sentences in grafs 2-4	Differences in lead-sentence mean and mean of graf 2-4 sentences
1. Holland Sentinel Stauffer	25.7	19.1	+6.6
2. Adrian Daily Telegram Thomson	24.9	18.8	+6.1
3. Ypsilanti Press Garden State	24.3	22.8	+1.5
4. Marquette MiningJournal Thomson	21.4	17.5	+3.9
5. News of Boca Raton Knight-Ridder	**21.4**	**17.5**	**+3.9**
6. Traverse City R-Eagle Ottaway	19.3	17.8	+1.5
7. Royal Oak Daily Tribune Adams	17.5	14.4	+3.1
8. Midland Daily News Hearst	16.6	17.7	-1.1
9. Battle Creek Enquirer Gannett	16.4	17.9	-1.5
10. Monroe Evening News Monroe Publishing	15.7	16.8	-1.1
11. Port Huron Times Herald Gannett	12.6	18.8	-6.2

Hypothesis Number Three: Sports leads at *The News* of Boca Raton and the Michigan newspapers fall in an easier reading range than do the news leads.

This may be the most interesting finding of the study. As Table 5 shows, sports lead sentences were significantly shorter in length than those composed by the newsroom. The difference was not due to sampling error. Sports writers and editors don't seem to be bound by the conventions of summary leads and of jamming unnecessary information into the lead. Sports writers also seem more willing to tell their story idea by idea.

Table 5 -- T-Tests

Comparing News Story Leads

Boca Raton		Michigan Ten			
Mean	Standard Error	Mean	Standard Error	t-Value	Prob.
21.0	1.62	21.5	0.47	-0.83	N.S.

Comparing News to Sports in the Eleven Newspapers

News Leads		Sports Leads			
Mean	Standard Error	Mean	Standard Error	t-Value	Prob.
21.4	0.46	18.9	0.69	2.27	p<.025

Comparing Lead Sentences to Other Sentences

Lead Sentence		Other Sentence			
Mean	Standard Error	Mean	Standard Error	t-Value	Prob.
21.1	0.38	19.3	0.23	-4.21	p<.001

Table 6

Mean Lead Sentence Lengths and Standard Deviations for All Newspapers

	Mean	Standard Deviation
Boca Raton News	21.0	8.59
Sports	21.4	7.95
Adrian News	19.7	8.31
Sports	24.9	5.66
Battle Creek News	17.3	6.84
Sports	16.4	5.86
Holland News	21.8	7.18
Sports	25.7	9.18
Marquette News	24.0	5.76
Sports	21.4	9.02
Midland News	20.7	6.34
Sports	16.6	5.82
Monroe News	24.3	6.72
Sports	15.7	5.70
Port Huron News	19.2	7.22
Sports	12.6	9.72
Royal Oak News	19.9	8.60
Sports	17.5	8.16
Traverse City News	22.9	9.05
Sports	19.3	5.43
Ypsilanti News	25.0	9.34
Sports	24.3	8.39

Five of the newspapers' sports leads are better than Flesch's standard of 19 words.(See Table 4) Those five are: Port Huron, Monroe, Battle Creek, Midland, and Royal Oak. Traverse City, at 19.3 words, can be added to that list when considering Gunning's 20-word guideline.

Hypothesis Number Four: In all 11 newspapers, the lead is usually composed of more than one sentence.

Quite the contrary is true. Ninety percent (405 of 450) of all the stories studied carried single-sentence leads. News stories were a little more this way, 279 of 304 for 91.8 percent versus 126 of 146 sports stories, or 86.3 percent. As Tables 7 and 8 illustrate, the problem is particularly acute for those newspapers with the longest average sentence lengths, as represented by those newspapers nearer the top of each table. For the newspapers listed nearest the top of Tables 3, 4, 7, and 8, the one-sentence/long-sentence lead syndrome seems to be alive and well.

Hypothesis Number Five: Leads for *The News* of Boca Raton and the Michigan newspapers are longer than other average sentences in the story.

This is most certainly true. Table 5 shows the statistically significant difference between the mean of lead sentences and those of sentences in paragraphs two through four. Lead sentences averaged 21.1 words, but the sentences for paragraphs two through four averaged 19.3

words. This is another suggestion that the long lead sentence syndrome is at work. Except for Adrian and Battle Creek in the news leads category, and four of the newspapers in the sports category, sentences are longer in the lead than in paragraphs two through four. (See Tables 3 and 4.)

Table 7
Single-sentence construction of news story leads (Ranked in order of longest lead sentences)

1. Ypsilanti	96.4 percent	27 of 28
2. Monroe	96.4 percent	27 of 28
3. Marquette	100.0 percent	28 of 28
4. Traverse City	92.9 percent	26 of 28
5. Holland	100.0 percent	28 of 28
6. Boca Raton	82.1 percent	23 of 28
7. Midland	78.6 percent	22 of 28
8. Royal Oak	87.5 percent	21 of 24
9. Adrian	78.6 percent	22 of 28
10.Port Huron	96.4 percent	27 of 28
11.Battle Creek	100.0 percent	28 of 28

Table 8
Single-sentence construction of sports story leads
(Ranked in order of longest lead sentences)

1. Holland	100.0 percent	13 of 13
2. Adrian	92.3 percent	12 of 13
3. Ypsilanti	92.3 percent	12 of 13
4. Marquette	100.0 percent	14 of 14
5. Boca Raton	84.6 percent	11 of 13
6. Traverse City	100.0 percent	14 of 14
7. Royal Oak	72.7 percent	8 of 11
8. Midland	64.3 percent	9 of 14
9. Battle Creek	100.0 percent	14 of 14
10.Monroe	84.6 percent	11 of 13
11.Port Huron	57.1 percent	8 of 14

CHAPTER 6

DISCUSSION

Not all the hypotheses were supported. Contrary to expectations, *The News'* leads were not easier to read than the Michigan newspapers' leads. Neither were the leads in all eleven daily newspapers composed of more than one sentence in most cases. Two-sentence leads were the exception, not the rule. The data show mostly one-sentence leads with more words than readability experts would suggest. The problem was found more in the news sections than in sports sections.

The long-sentence leads were highlighted by the decline in sentence length in the second, third and fourth paragraphs. Writers wrote more simply after the lead than in the lead ... a practice that probably won't benefit the readers who are discouraged by long leads.

The author is not suggesting that a newspaper writer or editor may never begin a story with a long sentence. That would be silly. What is being suggested is that beginning a story with a long sentence is usually a bad idea: it is often a symptom of poor newspaper writing and it may create a barrier to reader interest in the story. Usually a long lead sentence is due to using a summary lead, including unnecessary detail in the lead, giving more than one idea in the lead, or all three. But as this study

shows, writers and editors too often disregard crispness and brevity. That's a fatal flaw for leads, which Flesch says should be the most readable part of the newspaper story.

Following are some examples of long leads taken from among the sample of 450 stories. After each lead are some suggestions about what should have been done.

From the February 15, 1993 *News* of Boca Raton, Page 1B:

''With the military defeat of Iraq, the collapse of the Soviet Union and a new U.S. president, Israel stands at a historical juncture filled with both the promise of regional peace and the peril of spreading terrorism.''

This is the lead to the story about a local speech given by one of President William Clinton's foreign policy advisers. Although not a true summary lead, it's long and boring. And the best part of it is at the end. It's an example of backing into a sentence, which is rarely a good idea.

Explains writing expert Paula LaRocque of the *Dallas Morning News*: ''Backing in violates the clearest communication in English--that of subject, verb, and object, in that order. ... We may decide to violate that sequence for specific stylistic reasons, and do it

effectively. But when we violate it without good reason, we jumble natural and conversational syntax.''[59]

Another example of a long lead sentence that is difficult to digest, from the editing-intensive Boca Raton paper. This appeared in the October 31, 1992 issue, Page 1C:

''Results of the police investigation into human fetuses found in a Dumpster(cq) behind a Boca Raton gynecologist's office have been turned over to the State Attorney's office, police said on Friday.''

The writer and editor are wisely writing a follow to a significant local story. But they've put the reader through quite a tangle and added attribution, which could be lower. Wouldn't something like this be better:

''The State Attorney's office on Friday received a police report about human fetuses found in a dumpster behind a Boca Raton gynecologist's office. Police just wrapped up a week-long investigation.''

Summary leads take many forms, most of them bad. Here's the take-a-long-time-to-bore-us lead. From the October 31, 1992 *Marquette Mining Journal*, Page 3A:

''MARQUETTE - A current commissioner, two former commissioners and a newcomer all stress strong commitment

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[59]Paula LaRocque. ''What do Garages and Good Writing Have in Common?'' Quill 81 (July/August 1993), 26.

to community in their bids for two Marquette City Commission seats.''

Now if that doesn't discourage interest in city council, what will? The writer, at the very least, should have looked for something interesting one of the candidates said, and led with that.

Here's the confuse-us summary lead. From the January 24, 1993 *News* of Boca Raton, Page 8A:

''Gov. Lawton Chiles wants to keep a promise made to voters five years ago by seeking ''lottery justice'' from the state Legislature so that lottery revenues are used for education enhancement, not necessities.''

Isn't education a necessity? And why use his term ''lottery justice'' in the lead. If it's worthwhile, it ought to be a quote lower. Wouldn't this have been better:

''Gov. Lawton Chiles plans to keep a campaign promise to ensure the state Legislature uses lottery revenues for education enhancement.''

Here's the missed-the-whole-point summary lead, from page A3 of the January 24, 1993 *Adrian Daily Telegram*:

''CLINTON - The last month of operations at Tecumseh Products' Peerless Gear and Machine Division in Clinton is also the last month of services provided through a state Department of Labor action grant designed to help displaced workers adjust to life after the plant closing.''

Wow. That lead discourages readership of an important local issue story. Wouldn't something like this be better:

''CLINTON - Peerless Gear and Machine Division workers who will be laid off next month may be denied state funds. The program designed to allow such workers to adjust their lives will end this month.

About 400 Clinton workers could be affected.''

Sports writers showed more variety in their leads, but occasionally a summary lead sneaks in. Here's the winner for length, 62 words from the February 15, 1993 *Marquette Mining Journal*:

''MARQUETTE - U.S. Olympic Education Center (USOEC) junior champions Aboyami Miller (lightweight, 132 pounds) of Toledo, Ohio and Chad Kirby (light middleweight, 156) of Billings, Mont. -- both attending Marquette Senior High School -- will headline an eight-man USOEC team in the 1993 U.S. Boxing Championships March 1-6 in Colorado Springs, Colo.''

It seems the news is this upcoming competition. But, Colorado Springs is a long walk from Marquette. This final example suggests the writer took the easy way out: he or she wrote a poor summary lead. The editor also took the easy way out: he or she didn't edit the story.

The good journalist's fundamentals are still the key to solving the problems with leads. Terseness combined with a good story plan will solve these problems and create a

more readable newspaper. But doing the job well may require a little more time and work.

Paula LaRocque spreads the same gospel. She lectures to writers and editors' groups around the nation and is a frequent contributor to *Quill* magazine. Here's what she proposed recently:

> Writing clearly and briefly takes work, but it's work writers must be willing to do if they wish to attract rather than repel readers. Mark Twain knew that when he apologized to a correspondent for the length of a letter: ''I would have written you a shorter letter,'' he explained, ''but I didn't have the time.''[60]

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[60]Paula LaRocque. ''Fuzziness: Don't Force Readers to Clear Up Your Writing,'' *Quill* 81 (September 1993), 36.

CHAPTER 7

CONCLUSION

The News of Boca Raton, Florida, has snappy graphics, catchy refers and color photographs. The Michigan newspapers that were studied can easily add any of those three elements they lack. But what *The News* and the ten Michigan newspapers most need is prose that is easy to comprehend by a majority of the adult population. This look at story leads suggests most writers and editors pay too little attention to readability and to how many readers might be discouraged by complex writing.

A recent comprehensive literacy survey, administered by the Educational Testing Service and funded by the United States Department of Education, carries an implicit warning for the newspaper industry. The survey of 26,000 adults suggests about 50 percent of United States adults fall in the two lowest levels of literacy proficiency. That means they either ''demonstrated skills in the lowest level of prose, document, and quantitative proficiencies'' or ''were apt to experience considerable difficulty in performing tasks that required them to integrate or synthesize information from complex or lengthy texts.'' In other words, about half the roughly 191 million adults in America have significant difficulty navigating anything more

elaborate than simple writing or cannot even cope with simple writing.[61]

Most studies suggest daily newspapers have done little to make their stories more readable. The results here suggest newspapers are still outside the bounds of writing that is easy to comprehend. Bad writing conventions and poor construction conspire to create a daily newspaper that is less accessible than it ought to be. And, so many American daily newspapers are in this under-50,000 circulation category that their welfare may be a bellwether of the industry's welfare. This study of eleven newspapers cuts across nine publishing companies. That's a telling fact.

Harry Stapler attributed the huge lead sentences he found to use of the summary lead, which typically begins an inverted pyramid-structured story. But this study suggests that other causes for long sentences in leads were unnecessary detail and jamming more than one idea in each sentence, as cited in Chapter 6.

The long, summary lead rarely works. It's a sad replacement for a crisp lead to kick off a well-written story. In his 1985 study, Harry Stapler recommended keeping each sentence to one idea. That's a program to end sentence

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[61]United States Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, *Adult Literacy in America*. Washington, D.C.: United States Government Printing Office, 1993, xiv-xv.

elephantitis. And many experts are in agreement. Ken Finkel is one. Finkel is a professional writing and editing coach. He is former associate editor of the *Miami Herald* and former sports editor of the *Houston Post*.

''The key is simple: one idea to a sentence,'' Finkel said. ''This guideline not only puts a clamp on clutter, but it also forces simplification.''[62]

Writing expert Paula LaRocque, of the *Dallas Morning News*, agrees.

''The most important point is that simplicity doesn't 'dumb the story down' -- it merely makes it instantly accessible. That's what readers want.''[63]

And, it's what newspaper writers and editors should give to readers. The long-sentence lead was a bad idea when Melvin Lostutter and Wilbur Schramm disparaged it in academic journals forty-five years ago. And, it's still a bad idea.

Some publishing companies do pay attention to readability and sentence lengths. Gannett is a good example. Gannett's newspapers in the study, *Port Huron Times Herald* and *Battle Creek Enquirer* were the newspapers with the shortest news leads. They were two of the three

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[62]Kenn Finkel. ''Editing.'' Atlanta, Georgia: New York Times Newspaper Group Conference for Sports Editors, 1989. Photocopied, 3.

[63]Paula LaRocque. ''Clarity Need Not Mean the Same as Dumbing Down.'' *Quill* 81 (April 1993), 39.

shortest in sports leads. There's a reason: corporate management monitors sentence lengths because they are a sign of unnecessary complexity and a hindrance to readership.

Sadly, Gannett is the only publishing company in the study that specifically monitors sentences lengths. But lack of information does not hinder editors when it comes to readability. Each year, in the Michigan Associated Press's annual wire study, a section is devoted to readability. The AP lays out the easy-to-use Gunning Fog Index, then shows how its state wire stories fared under it. Copies of the wire study are mailed to editors, managing editors, news editors, city editors and sports editors throughout the state.[64]

Newspaper writers and editors are notorious for their neglect of readability. The *Columbia Journalism Review* reported this from a survey of twenty-five newspaper editors:

> When asked whether computers improved the overall quality and readability of stories, 28 percent of the editors said they saw improvement, and 16 percent noted no change, but 56 percent said

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[64]''AP Wire Study '93.'' Traverse City, Michigan: Michigan Associated Press Editorial Association meeting, 1993. Photocopied.

the impact, the relevance of the topic, and the overall quality had diminished.[65]

Reporters at the *Lexington Herald-Leader* complained when a readability program was added to the newspaper's computer system in 1987. After lectures on writing readably and a brief education on how to use the program, little changed. ''... man seems to have beaten machine by ignoring (the readability program). Tests since 1986 have shown almost no change in readability levels at the paper.''[66] Even the editor who introduced the program, Harry Merritt, dismissed it. ''To be honest, I get more results by talking to reporters on a one-to-one basis.''[67]

Every newspaper should have a policy about sentence lengths. That policy will then create a decision process that will not only shorten average sentence lengths, but probably push writers to better brevity and crispness. That brevity and crispness will yield newspaper stories that are easier to comprehend.

Reporters could drop some of their conventional wisdom and adopt some of the notions circulating in the sports department. Like telling a story, idea by idea,

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[65]Andrew Schneider, ''The Downside of Wonderland,'' *Columbia Journalism Review* 31, (March/April 1993), 55.

[66]Steve Haynes, ''See Spot Write,'' *Columbia Journalism Review* 28 (May/June 1989), 16.

[67]Ibid.

rather than following the inverted pyramid and ponderous sentences until the newspaper industry has no readers.

The sports writing was the bright spot in this study. Free-wheeling, story-telling sports writers seem to have a more comfortable handle on the prose they produce. They rarely go with a summary lead. Maybe that's one of the reasons for the sports section's popularity.[68] Sports story construction seems to have the average reader in mind.

Let's junk the long-sentence leads and insist on brevity, which should always be a journalist's goal. That's a program to improve writing and the daily newspaper's readership.

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[68]Rambo, *presstime*, 21.

APPENDIX

Coding Instructions

CODING SHEET

Go to page 1-A.

Look on page 1-A for staff bylined stories. Bylined stories by AP or other obvious news services are unacceptable.

To be considered, a story must be at least four paragraphs in length.

Go to upper-left hand corner of page, staff-produced stories are then chosen on a first closest, first, second closest, second. After all the staff bylines have been gone through, then obvious staff-produced stories without bylines are selected on the same page. If the story is not bylined, it must be clearly local.

If the page has not produced the necessary quota of stories, then go to page 2-A. Each page is done from front to back of the newspaper.

The procedure used for sports is to begin with the sports split page, and follow the procedure above. Since sports roundup stories are news, such as a girls' basketball results roundup, it may be considered in the study. However, the top item must be at least four paragraphs in length.

Some newspapers still use datelines. These are simply disregarded. Also, taglines in the middle of story are disregarded.

A sentence is:

> each unit of thought that is grammatically independent of another sentence or clause, if its end is marked by a period, question mark, exclamation point, semicolon or colon. Incomplete sentences or sentence fragments are also to be counted as sentences. For example, count as two sentences: What did the minister talk about? Sin. Count as two sentences: The Lord is my shepherd; I shall not want. Count as three sentences: There are two arguments against this plan: 1. It is too expensive. 2. It is impractical. Count as two sentences: Result: Nobody came. But count as one sentence only: He registered, but he did not vote. (Two independent clauses, combined into a compound sentence with only a comma.) Count as one sentence: There were three people present: Mary, Robert, and John. (The words after the colon are not a separate unit of thought.) Count as one sentence: This project is supposed to: (a) provide training; (b) stimulate suggestions. (No part of this is an independent clause. Count such material as one sentence even if it is paragraphed.)
>
> In dialogue, count the words he said or other speech tags as part of the quoted sentence to which they are attached. For example, count as one sentence: He said: ''I have to go.'' Count also as one sentence: ''That's all very well,'' he replied, showing clearly that he didn't believe a word of what was said.[69]

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[69]Rudolf Flesch. *How to Test Readability*. New York: Harper & Brothers, 1951.

A word is letters, numbers, or symbols or groups of letters, numbers, or symbols that are surrounded by white space. For example, these count as one word: chair, $32,898, F.B.I., hard-news, 89-yard, teen-ager, and *Herald-Leader*.

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