A Study of Business Letter Features*

ABSTRACT: As part of their work, forensic document examiners examine word processed letters. The purpose of this study, the first of its kind, was to determine how common or rare certain features are in word-processed business letters and if any of these features could determine the author or source. Initially, 114 original business letters were obtained that were dated from 1999 through 2003. Specific features of the letters were selected for examination. These features were *letter format, type style*, the *point size* of the font, *margin spacing* to ascertain the use or nonuse of the default margins for Word (1.25 in. nonjustified) and the default margins for WordPerfect (1 in. nonjustified). In addition, the research involved the examination of the right margins to determine if they were *justified or not* and the use of the *comma or colon* in the salutation of the letter. The features of each letter were independently examined by the authors and the findings documented. As expected, several features were found to be very common. For example, *full block* format was used on 48% of the letters followed by the *semi-block* with 39%. The Times Family of fonts was used on 67% of the letters. Font *point size* 12 was the most popular with 70%. The nonjustified *default margins* were widespread with 67% and the *colon* was the overwhelming favorite in the salutation with 79%. There were some unexpected findings that could possibly lead to the identification of a source or typist.

KEYWORDS: forensic science, questioned documents, business letter format, word processing

The purpose of this study was to determine how common or rare certain features were in word-processed business letters and if any of these features could determine the author or source. The research involved the examination of the *letter format, type style*, the *point size* of the font, *margin spacing* to ascertain the use or nonuse of the default margins for Microsoft[®] Word (which are 1.25 in. nonjustified) and the default margins for Novell WordPerfect (which are 1 in. nonjustified). In addition, the research involved the examination of the right margins to determine if they were *justified or not* and the use of the *comma or colon* in the salutation of the letter.

Two of the most prevalent word processing systems used in business today are Microsoft[®] Word and Novell WordPerfect. The default type style for each of these systems is the OpenType font Times New Roman (TNR), 12-point size. OpenType fonts carry the extension .otf and can contain 65,000 different glyphs to enable the type to be set in non-Roman languages such as Japanese, Chinese, and Korean. Apple Computer's AppleWord word processing system uses the TrueType font Times, 12-point size, as its default. Times is a registered trademark of Heidelberger Druckmaschinen AG (1). TrueType fonts carry a .ttf extension and are typically used in home and office environments.

As explained by Winter and Anderson (2), TNR is one of the most popular type styles and has numerous derivatives such as Times, Times Roman, Times CG, and Times Europa. In their study, difficulty was found in distinguishing some of these type styles, particularly Times New Roman and Times Roman. The obvious

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differences were found in the formation of the symbols and that often these symbols do not occur in questioned documents. Another difficulty may be the availability and use of several versions of TNR (3). For example, Microsoft[®] incorporated at least seven versions of TNR with its Windows products. For the purposes of this study, the authors chose to examine how often TNR and its derivatives were used in business letters and referred to TNR and its derivatives as the Times Family. It is interesting to note that the United States State Department announced that as of February 1, 2004, all United States diplomatic documents would use TNR 14 point size instead of Courier New 12 point (4).

Methods and Materials

A literature review was conducted to determine if recent research was conducted relating to the structure or class characteristics of word-processed business letters. One paper was found (5) that dealt with determining the design and structure commonly used in the preparation of typewritten business letters. However, the design and structure related to the type of business and size of the firm. Regarding type styles, Bernard, et al. (6) examined eight "of the most commonly used fonts" for differences in reading effectiveness, reading time, and perceptions of font legibility, font attractiveness, and general preference. The fonts examined were: Century Schoolbook, Courier New, Georgia, TNR, Arial, Comic Sans MS, Tahoma, and Verdana. These authors concluded that generally TNR and Arial were read faster than other fonts; a 12-point size font was read faster than a 10-point, and Arial, Courier, and Georgia were perceived as the most legible.

For this pilot study, 114 original business letters were obtained that were dated from 1999 through 2003. All letters were personal business correspondence; i.e., they were not mass produced. In this research, *personal business correspondence* is defined as business letters to one individual or entity used by organizational hierarchies (work related), and based in business-communication situations. The letters originated from 22 different states and the District of Columbia. With the exception of 3 letters that were each written on

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odd sized paper, the vast majority was written on standard 8.5 in. by 11 in. paper. Every letter was given a number that corresponded with those in a Microsoft[®] Excel spreadsheet that contained headings: *Format* (full block, semi-block, or modified block), *Type Style*, *Font Size*, 1" Margins (yes or no), 1.5" Margins (yes or no), Justified (yes or no), *Colon or Comma* (in the salutation), and a remarks section for questions or what may be unusual observations.

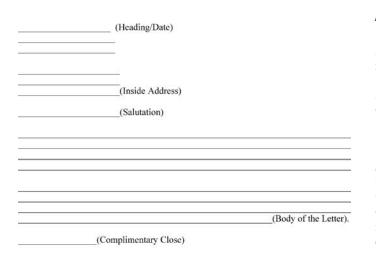
A second spreadsheet was prepared with the name(s) of each letter sender. No two letters were used from the same sender. The authors independently examined the letters and documented their findings under the appropriate headings on the spreadsheet. Any differences in observations were discussed and a consensus reached as to data findings.

Accepted standards for drafting business letters were found to include six essential parts (7–9): the **heading** (complete address and phone of sender with the date), the **inside address**, the **salutation** (or greeting followed by a colon), the **body** (text), the **complimentary closing** (followed by a comma), and the **signature**. Business letters are generally typewritten on one side of the paper using $81/2 \times 11$ in. paper. Today, there are several software packages that teach the art of writing a business letter. There may be some variation regarding color of paper (which is preferably white) and spacing between paragraphs in the body of the letter (which is generally two spaces). However, the essentials remain the same.

Results

Over the years, there have been three accepted styles or formatting for business letters (8): the full block (Fig. 1), the modified block (Fig. 2), and the semi-block (Fig. 3). The full block offers no indenting; all typing begins at the left margin. In the modified block, the heading (date), the complimentary close, and the signature are indented. The semi-block contains indented paragraphs along with the indented heading, complimentary close, and signature. In this research, 55 letters (or 48%) were classified in the full block style, 39 (or 34%) in the semi-block style, and 19 (or 17%) in the modified block style (Table 1). One business letter did not follow any of the three generally accepted formats as it was prepared using a memorandum format.

Regarding type style, 77 (or 67%) of the letters contained a Times Family font. Two of the letters with the Times Family font contained



(Signature)

FIG. 1—Full block style for a business letter with no indenting.

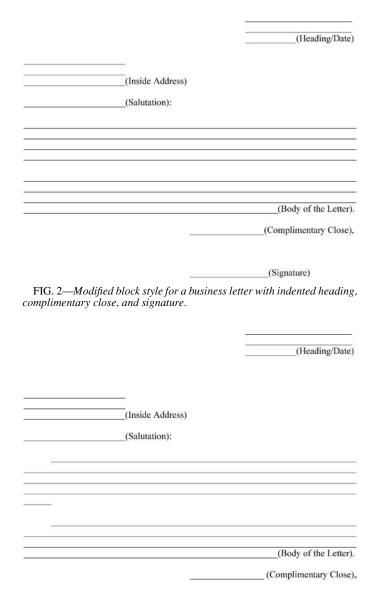


FIG. 3—Semi-block style for a business letter with indented heading, paragraphs, complimentary close, and signature.

(Signature)

an additional type style—Courier and Universal respectively. The next most used type style was Arial, which was found on 20 letters (or 17%). Of the letters with the Arial type style, one was Arial Bold and one was Arial Italics. The remaining type styles found were: 5 Courier New, 2 Garamond, 2 Tahoma, 1 Arrus BT, 1 Bookman Old Style, 1 Century Gothic, 1 CG Omega, 1 High Tower, 1 Microsoft Sans Serif, 1 Trebuchet MS, and 1 Universal.

The most widely used font point size was 12, which was found on 80 letters (or 70%). Surprisingly, the second most used font size was 11 found on 16 of the letters (or 14%). The third most used font size was 10, which was found on 13 (or 11%) of the letters. On two letters, the font size was 13. On two additional letters the font size was found to be 14, and on one letter the font size was a combination of 10 and 12.

Margin settings were observed to vary widely on 38 (or 33%) of the letters. Some of the left margin settings were wide to accommodate printed letterhead extending along the left side of the paper. Only 24 letters (or 21%) contained the 1.25 in. default margin

TABLE 1—Results of the examination of 114 business letters relating to
format, type style, font point size, margin spacing, right margin
justification, and use of colon or comma in the salutation.

Format	Number	%age
Full Block	55	48%
Semi-Block	39	34%
Modified Block	19	17%
Memorandum	1	1%
Type Style		
Times Family	77	67%*
Arial	20	17%**
Courier New	5	4%
Garamond	2 2	2%
Tahoma		2%
Arrus BT	1	1%
Bookman Old Style	1	1%
Century Gothic	1	1%
CG Omega	1	1%
High Tower	1	1%
Microsoft Sans Serif	1	1%
Trebuchet MS	1	1%
Universal	1	1%
Point Size		
12	80	70%
11	16	14%
10	13	11%
13	2	2%
14	2	2%
10 and 12	1	1%
Margin Spacing		
1.00 inch	52	46%
1.25 inches	24	21%
Varied	38	33%
Right Margin Justification		
Nonjustified	76	67%
Justified	38	33%
Salutation Colon or Comma		
Colon	90	79%
Comma	19	17%
Semi-colon	1	1%
"Welcome!"	1	1%
No Salutation	3	2%
110 Salutation	5	∠ /0

* Additional type style on two letters, Courier and Universal respectively.

**One letter in bold type and one letter in italics.

settings found in Word, while 52 letters (or 46%) were found to have the 1 in. default margins found in WordPerfect.

As to the category of justifying or not justifying the right margins, 76 letters (or 67%) were prepared using the default of nonjustifying the right margin. Only 38 letters (or 33%) were found with justified margins.

In the salutation, colons were used by the typists of 90 letters (or 79%). Commas were used on 19 letters (or 17%). One typist used a semi-colon. Another used a "Welcome!" for the salutation and 3 letters did not contain a salutation.

Discussion

With 48%, the *full block* format for business letters was found to be the most popular, followed by *semi-block* on 34% of the letters, and *modified block* on only 16% of the letters. Although these formats can be described as class characteristics, some interesting indentation characteristics were observed that could lead to a source or a keyboard typist:

 Six letters classified as *modified block* had only the date indented;

- b. Two letters classified as *semi-block* did not indent the date;
- c. Typists on two letters indented each paragraph twice (the default for indenting a paragraph is generally 12 spaces, these indentations were 24 spaces);
- d. One letter contained a 16 space indentation for each paragraph;
- One letter used the paragraph indentation spacing for the closing;
- f. One letter contained indentations far right for the date and closing; and on
- g. One letter the typist used 4 spaces after each period in a sentence.

The one business letter prepared in memorandum form was unusual and may be a characteristic worth noting when examining the source of a questioned document. Generally, the examiner would want to know if a particular entity, company, or typist used the same format each time.

Clearly, with 67%, the Times Family type style was the most ubiquitous, followed by Arial with 17%, then Courier with less than 1%. The use of bold type, italics type, use of two different type styles, or some of the lesser known/used type styles may assist in finding the source of a questioned document.

The use of point size 12 was found to be the most popular with 70% of the letters containing this font size, followed by point size 11 on 16% of the letters, then point size 10 on 11 letters. Less common or more unusual point size features were noted on:

- a. Two letters containing point size 13, which is not automatically available in the Microsoft Word pull-down font size menu; however, it is with WordPerfect. This may be one factor to consider when examining a particular word processing system.
- b. Two letters contained point size 14; and
- c. One letter contained a combination of 10 and 12 point size.

Although 52% of the letters were found to have 1 in. margins (right and left) and 21% had 1.25 in. margins (right and left), the remaining letters contained an extremely wide variety of margin spacing. This variety may be useful when trying to identify the source of a typed document. The authors do not imply that the use of the 1 in. or 1.25 in. margins are an identifying feature of the word processing system used. The figures only represent the common use of the 1 in. and 1.25 in. margins.

As to justifying or not justifying margins, clearly the majority of typists (67%) prepared letters using the default of nonjustifying the right margin.

Finally, in the salutation, the colon is the overwhelming favorite with 79% use, followed by the comma with 17%. There were anomalies observed in the salutation that could assist the examiner in finding the source of a questioned typed document:

- a. One typist used a semi-colon, which is incorrect punctuation;
- b. One letter contained a "Welcome!" for the salutation;
- c. Two letters did not contain a salutation; and
- d. One letter omitted the line spacing between the salutation and the first paragraph.

Further study may involve the common or uncommon use of paper and watermarks found in mailed business letters. It should be noted that this study did not attempt to examine the use of business correspondence via e-mail.

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Conclusion

Word processing has replaced the typewriter for business correspondence. From this research, clearly the three generally accepted formatting styles for typed business letters (which have been in use for many years) are still in use today. Some deviations of the formatting styles were observed and these deviations may assist in finding the source or typist of a questioned document. As a result of this research, some word processing features can be classified as very common or *class characteristics*. Examples of the more common class characteristics are: the use of the Times Family of fonts, point size 12, 1 in. margin spacing, nonjustified right margins, and the use of the colon in the salutation. Examples of some uncommon features noted were the use of: two different type styles in a letter and the use of a semi-colon in the salutation.

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