

TECHNICAL NOTE

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Comparison of Modern Typestyles

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ABSTRACT: Typewriter examinations have become increasingly difficult in recent years. The copying of typeface designs by different manufacturers has compounded the problem. Can accurate make and model determinations be made from the examination of typewritten texts? Similar typestyles are examined in an attempt at differentiation.

KEYWORDS: questioned documents, typewriters, comparative analysis

It is the premise of this paper to provide information that will be of assistance in examinations attempting to differentiate between typestyles. This discussion is not in any way all inclusive. My opinion is that accurate typestyle classifications are at times possible, however, caution must be exercised.

Proliferation of the electronic typewriter, or ET as they are referred to by the industry, and word processors has not only complicated the classification of typestyles, but severely hampered traditional identification processes. Identifications relative to modern daisywheel systems are virtually nonexistent. It is evident that reported research is lacking.

It has been known for some time that typewriter manufacturers have purchased fonts from various sources. This practice it would appear is continuing. Examinations of printwheels found on different ETs confirm that some daisywheels are off-the-shelf items adapted to specific printing mechanisms. For example, a printwheel element examined for a Swintec ET was marked "Made in Japan" and had a designator "M051-045," representing Courier 10. A printwheel examined for a Royal Alpha 2015 ET was identical in markings to the Swintec element. Additionally, comparison of both Courier 10 strike-ups shows they cannot be differentiated.

Conversations with a Swintec Corp. representative and a Swintec typewriter dealer revealed that the resemblance of both the elements and the machines themselves was not coincidental. It was explained that the Nakajima Company Ltd. of Japan produces both the Swintec line of ETs and the Royal Alpha ET, as well as others. I was informed that the Nakajima Co. is a generic manufacturer of typewriters and elements. Even the Sears Communicator line of ETs are produced by the Nakajima Co. As would be expected,

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printwheels for the Sears Communicator ETs, Swintec ETs, and the Royal Alpha 2015 are all interchangeable. Even to add to this dilemma, examination of a Sears Communicator I ET manufactured by Nakajima in Japan revealed that its printwheel bore the Adler Royal logo. The following is a list of ETs which are equipped with Nakajima printheads and therefore the printwheels are all interchangeable: Swintec, Sears Communicator I and II, Royal Alpha 2015, Olympia Electronic Compact, SCM Typetronic, and Teletex TTX 1014. It is not known whether the latter is an ET or a printer. The list of compatibility probably extends further, but this could not be confirmed at this writing. Of course, this is only one example of element compatibility facing examiners confronted with typewriter problems. Is it still possible to distinguish between typesyles provided with information such as this? Examinations show that under certain circumstances it is. Obviously not all problems will be resolved conclusively.

Discussion

Since IBM Corp. typesyles have been copied in design and in name, IBM strike-ups have been selected as the standard to which other typesyles were compared. Initially, however, IBM 88 character elements for the Correcting Selectric II typewriter were compared to IBM 96 character elements for the Selectric III typewriter. Four of the more popular typesyles were chosen for this portion of the discussion: Courier 10, Prestige Elite 12, Prestige Pica 10, and Letter Gothic 12. IBM introduced the Selectric System 2000 typewriter series in the latter part of 1984. Two cartridge printwheel typesyles for the Wheelwriter 3 and 5 ETs of that series available at this writing have been included. They are Courier 10 and Prestige Pica 10. Of interest, the Selectric System 2000 series presently consists of three typewriters: the Wheelwriter 3, Wheelwriter 5, and the Quietwriter 7. The Wheelwriter 3 and 5 ETs utilize cartridge printwheels which can be used on either model, and are also compatible with the new IBM Wheelprinter. The Quietwriter 7 is an electrical thermal type ink transfer system and samples from this typewriter will not be considered.

Note that all examinations and photography for the illustrations were conducted at original magnifications of $\times 25$ on a Projectina Universal Comparison Projector. Hand magnifiers and stereomicroscopes were of little value in distinguishing between some of the more subtle design changes and differences noted. Side-by-side comparison was found to be essential.

The first series of figures illustrates that design changes have occurred in IBM elements. These do not in any way represent all the changes that were noted. Illustrations were chosen because they were (1) more easily recognized and (2) the frequency of their occurrence in typical case work.

In Fig. 1, the redesign of the numeral one (1) from the Selectric II to the Selectric III element is obvious, but the Wheelwriter numeral one (1) exhibits no noticeable change when compared to the Selectric III numeral one (1). Redesign of the numeral four (4) has taken place on all three elements. Most prominent is that of the extreme ending point of the crossbar. Note the absence of the ending upturn on the Selectric III four (4), and its reappearance on the Wheelwriter numeral four (4). The upturn at the ending of the crossbar on the Wheelwriter four (4) has been flattened (Fig. 1).

The lower case "r's" depicted in Fig. 2 shows the general reduction in the width of the lines of the Selectric III lowercase "r" when compared to the lowercase "r" for the Selectric II. Also the juncture of the upper right extension where it meets the vertical shaft on the Selectric III "r" appears lower because of the width reduction.

Both the semicolon and slash mark for Selectric 96 Courier character elements have undergone redesign (Fig. 3). Although subtle, the "period" above the "comma" and the "comma" itself for the Selectric III semicolon have been reduced in size. The angle, length, and width changes in the Selectric III slash mark are obvious.

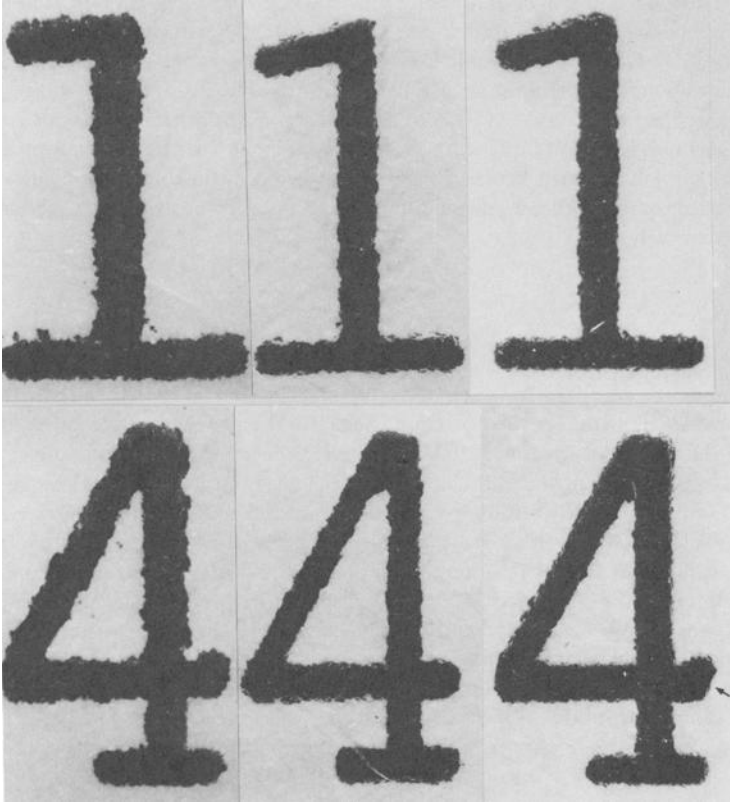


FIG. 1—The numerals “1” and “4” for Courier 10 designs, from left to right, Selectric II, Selectric III, and Wheelwriter elements.



FIG. 2—Courier 10 lowercase “r” from a Selectric II element, on left, and Selectric III element, on the right.

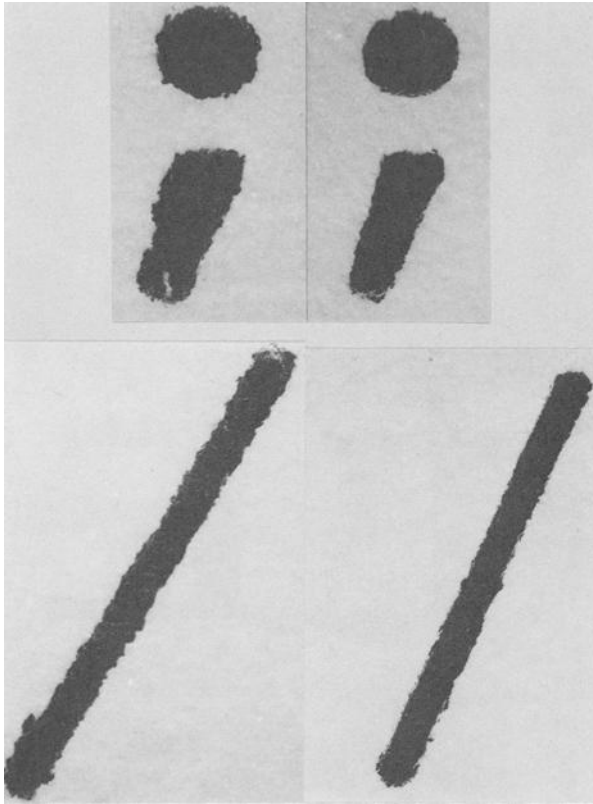


FIG. 3—Semicolons and slash marks for Selectric II and Selectric III Courier 10 elements. Selectric II characters are on the left.

Although some of the characters on IBM Selectric III elements have been reduced in size, the opposite is true for the lowercase “t” on the Prestige Elite 12-96 element. The increase in size of the Selectric III “t” is quite noticeable in Fig. 4. The change of the dollar sign can also be seen. Subtle thinning has occurred to the upper portion of the Selectric III exclamation point (Fig. 4).

The most prominent feature in the numerals shown in Fig. 5 is the decrease in size of Selectric III “4.” A subtle change which is observable to the lowercase “e” on the Wheelwriter element is the slight thinning of the bottom curvature when compared to the Selectric II “e” (Fig. 5).

Figure 6 shows the configuration change that has taken place in the commas from the Selectric II to the Selectric III elements. The period has increased slightly in its circumference on the Selectric III element. The semicolons in Fig. 6 show the marked difference in the distance between the “period” and the “comma” from the Selectric II to the Selectric III elements. Also observe the increase in the diameter of the “period” and the enlargement of the top portion of the “comma” in the Selectric III semicolon (Fig. 6).

Redesign of the one-half ($\frac{1}{2}$) symbol from the Selectric II to the Selectric III Letter Gothic element is illustrated in Fig. 7. The one-quarter ($\frac{1}{4}$) symbol was also redesigned to the horizontal crossbar style on the Selectric III element. The capital “E” for the Selectric III Letter Gothic element shows slight overall thinning of its lines when compared to the Selectric II capital “E” (Fig. 7).

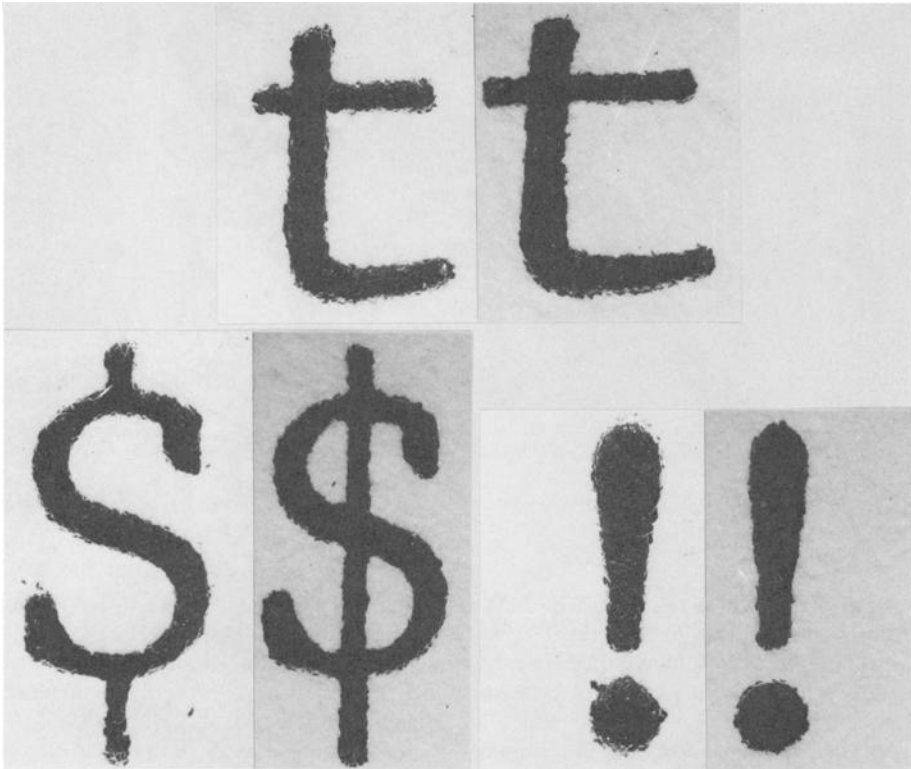


FIG. 4—Prestige Elite 12 designs for the lowercase “t,” dollar sign, and exclamation mark for Selectric II and Selectric III elements. Selectric II characters are on the left.

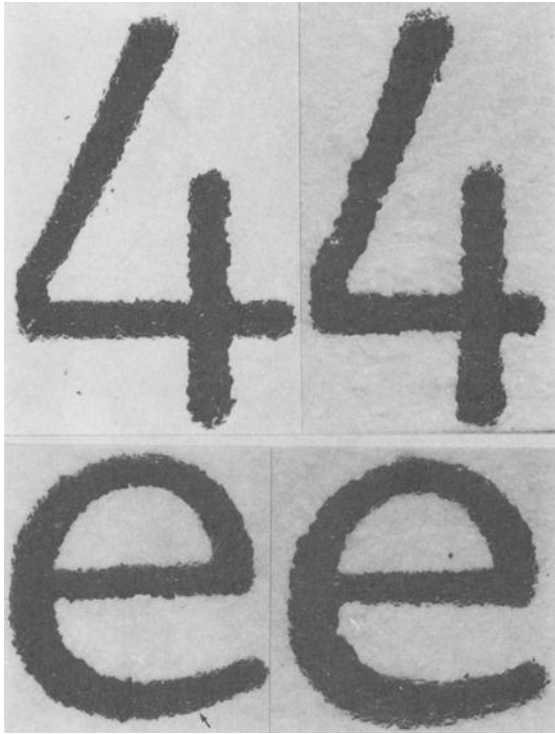


FIG. 5—Prestige Pica 10 designs for the numerals “4” on Selectric II, on the left, and Selectric III elements. The lowercase “e’s” are from Prestige Pica 10 elements for a Wheelwriter and Selectric II, respectively.

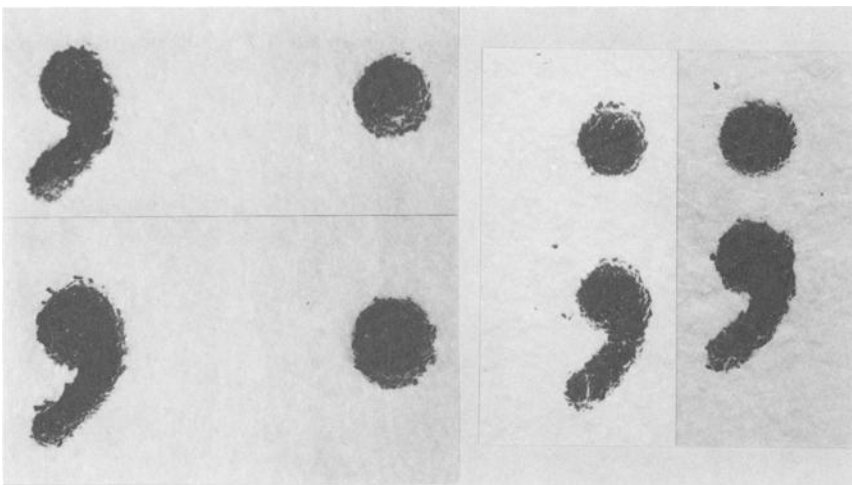


FIG. 6—The left side of this figure shows Prestige Pica 10 commas and periods for a Selectric II element, at the top, and Selectric III element, on the bottom. To the right of the figure are semicolons for Selectric II and III Prestige Pica 10 elements. The Selectric II semicolon is on the left.

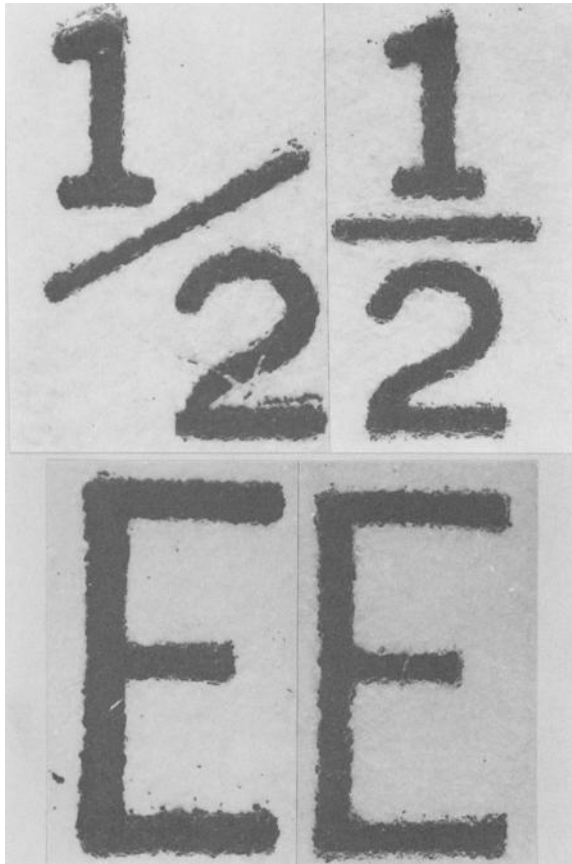


FIG. 7—Letter Gothic 12 one-half symbol ($\frac{1}{2}$) and uppercase “E” for Selectric II 88 character element and Selectric III element. The Selectric II characters are on the left.



FIG. 8—Lowercase letter “r” for Courier 10 typestyles. Beginning at the left they are, Exxon, Royal 5000 series, and Canon.

In Fig. 8, differences in the placement of the upper right extensions are readily discernible between the three lowercase "r's." Also note the narrower base of the Exxon "r." The right extension of the Canon "r" extends slightly farther to the right than the other extensions.

Figure 9 shows size difference between two commas for Courier 10. Subtle differences in designs of even commas can be helpful in attempting to differentiate typestyles.

The height difference of the capital "A" in Fig. 10 for the Royal 10/12 printwheel and the IBM 96 character element is easily discernible. The Smith Corona upper case "A" from a Memory Correct 300 ET printwheel is only slightly shorter than the IBM "A," however, the width difference of the left side or stem is quite noticeable. Figure 10 also shows design differences among three lowercase "a's." Note variations in the top curvatures and lower right "feet."

Differences in the configuration of the lowercase "i" dots can be seen in Fig. 11 for IBM, Canon, and Royal 5000 series elements for Courier 10 typestyles. Note the wedge shape of the upper left extension or flag on the Royal 5000 series printwheel "i."

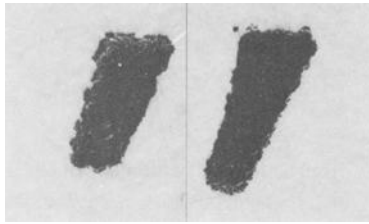


FIG. 9—Commas from Courier 10 typestyles for a Canon printwheel and a Selectric II element, respectively.



FIG. 10—Uppercase and lowercase "A's" for Prestige Elite elements for Royal 10/12 printwheel, on the left; Selectric III 96 character element, middle; and Smith Corona printwheel, right.

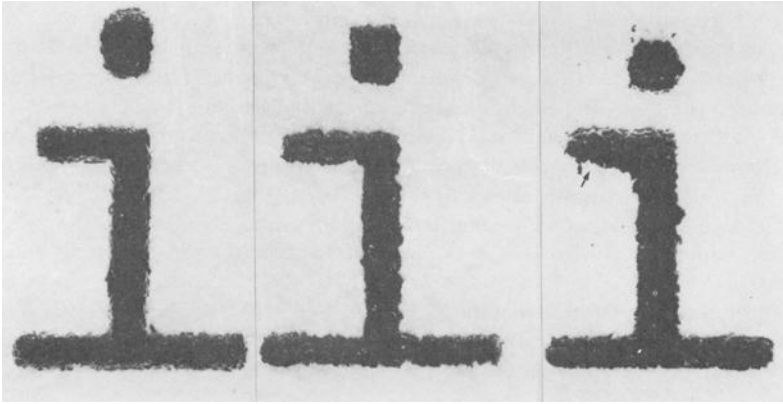


FIG. 11—Lowercase letter “i” for Courier 10 designs, from left to right, *Selectric III, Canon, and Royal.*

Conclusion

As stated at the onset, this discussion is not all inclusive nor is it a classification system for the differentiation of typestyles. Its sole purpose is to demonstrate that differentiation of modern typestyles is possible. Illustrations should only be used as preliminary guides and not substitutions for examinations of actual strike-ups. Although differentiation is possible because of the compatibility of elements for different typing systems, definitive statements regarding make and model determinations have been virtually eliminated.

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