

<b>SUBJECT</b>	<b>FORENSIC SCIENCE</b>
<b>Paper No. and Title</b>	<b>PAPER No. 8: Questioned Document</b>
<b>Module No. and Title</b>	<b>MODULE No.23: Typewriting</b>
<b>Module Tag</b>	<b>FSC_P8_M23</b>

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## 1. Learning Outcomes

After studying this module, you shall be able to

- Know about the necessity, individuality and analysis of typewriting

## 2. Introduction to necessity and scope of typewriting study

In the modern world of printers, scanners and the Xerox machine; typewriter has been able to keep a special seat reserved for it. Since all the important documents pertaining to property and the important transaction papers etc. all are typewritten, so there are more chances of the typewriter being one of the major evidences in most of the cases involving forgery of documents being specifically typewritten. The other important thing is most of the anonymous and threatening letters are typewritten because the forger thinks that he will escape easily. Many forgers and culprits are unaware of this fact that typewritten documents do have some individualizing characteristics as the other documents have and due to this fact most of the people thought that the typewriters even of different companies produce or being specific imprints same fonts and are that much uniform that any page can be replaced by document written with any of the typewriters. Although the detection of the typewritten document may be difficult if the sheets of documents are typed from the same machine and in little interval of time or if the substituted sheet is typed by two different machines of different make and model or the different machines of the same make and model both of which are new. The differences in the slant, spacing and nature of the adjustment of two particular letters and the broken part of any letter makes the identification a matter of certainty. Any defect in the machine either in the alignment of the base line or the bruising of the letters all defects can be used for individualization. There are number frauds which can take place by using typewriters and most of the cases are related to property. The questions which are asked during the examination of these documents vary from person to person and some of these queries are given below: -

- If a particular matter has been typed by the same machine or some different machine.
- If the date and figures or words and sentences have been altered.
- Whether the sheets of the document are written continuously in one sitting or in different dates.

- If the additions, alterations and interlineations are made at the same time or at different dates.
- Whether the matter was written by the particular machine, or by the machine of the same date, number and model.
- Whether the matter was typed by a particular operator or not.

### 3. Typewriters and their individuality

3.1 There is much different type of typewriters which are present in the modern world and there are different companies which own these typewriters. Companies like Remington, Halda, Facit, and Godrej are in the market and they use specific type of typefaces which provide specificities to the typewriters typewriting. The most famous typefaces are Pica and Elite. Pica typefaces type 10 letters per inch and Elite types 12 letters per inch. There are other typewriters too in the market and there typefaces type 6-16 letters per inch. We can determine the company, model and the type of typewriter on the basis of class characteristics but for the more specified results we must analyze the individual characteristics. One of the reasons why these class characteristics are important is that most of the manufacturers use a specific type of typefaces for their model of typewriters so, in case of any comparison for the identification purpose this can be of utmost importance, the other thing that an examiner should always keep in his or her mind that when a typewriter is used regularly there is some wear and tear which takes place in the typewriter specially in the typefaces provide with the development of individual features of the typewriter. There may be miss alignment of any letter or there may be double punching of any letter. All these features should be noted and analyzed carefully.

3.2 systems of typewriter: -

There are generally two methods in typewriting: -

- ✚ Sight system- the sight system is generally self-taught method, in which one or two fingers of both hands are used by the operator.
- ✚ This system is also called HUNT AND PACK system. In this method of typewriting the speed remains dull and the reproduction is of lower quality.

- ✦ The attention of the operator remains fixed to the key board. This system is generally utilized by the non-professional typists.
- ✦ In anonymous letter, it is found that even skilled typist descends to this system to disguise the habitual output.
- ✦ Touch system-in this system the work produced is of higher quality and gracefulness and is called as the touch system.
- ✦ In this system the attention of the operator is concentrated at the subject matter and very much accuracy, smoothness and speed are produced.
- ✦ By this system the operator succeeds in bringing out uniformity of impression and finish of superior quality

### 3.3 Individuality of typewriter: -

- As there are individual characteristics in the handwriting of person similarly there are individual characteristics in the typewriter too.
- So, as there is a protocol to analyze the handwriting of a person similarly there is a protocol to analyze the typewriting of a typewriting which is mainly dependent on the typeface defects of the typewriter.
- Even if the typewriters are of the same model and same make then also it is possible to distinguish one from the other because when a typewriter is used for regular period of time then it develops some peculiar features which can be used for its identification and individuality.
- The individual irregularities produced cannot be the same in every typewriter even if it is handled by the same person because the way it handles different typewriters may be different and thus will produce different features which will make an examiner to positively distinguish the typewriting of one typewriter from the other.
- The distinguishing marks of gradual deterioration and the distinctive character of writing identify one certain machine from all other thousands of machines.

3.4 Some of the important characteristics which should be mentioned for analyzing the typewriter: -

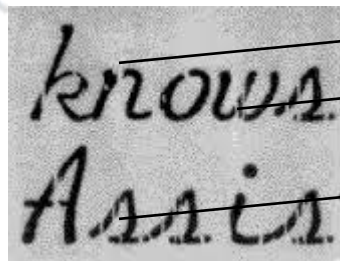
- ✚ Size- the size of the typed letters is dependent upon the typeface in use and the height of the letter along with the width of the letters regulates the line to line spacing of the typewriter machine. The typeface produces a specific style, design and the space between letters. So if these characteristics pertaining to the size of typewriting are studied then they will aid to the individualization process of the typewriter.
- ✚ Style- there is many styles which are available in different typewriters and is characterized by the typeface. The most famous of these styles are Pica and elite, there are other styles too like Gothic, Roman and Victorian. The style of the typeface can proof many facts including the date of the documents; since these typefaces have a date significance that is different typefaces have been launched in different years. So, if we say that a document is typewritten in the year 1908 and the style in which it has been typewritten corresponds to the typeface developed in the year 1988 then it can be easily said that the culprit is trying to mislead or trying to do fraud by the use of that document.
- ✚ Slant- the slant of the letters is so constituted that each letter must occupy certain location and space and remain parallel to each other. The slant can be of three types as mentioned in the handwriting too it can be either of right handed type, left handed type or a straight slant. The slant of the letter may get changed due to wear and tear but it is not possible that the slant of all the letters are changed and thus this type of defect in the slant of some letters only provides individuality to the typewriter. The slant of a typewriter or handwriting can be measured by using a glass protractor.
- ✚ Alignment- the alignment of the typewriter typed letters are generally remains aligned perfectly with the base line and do not diverge from the base line unless and until there is some defect in the base alignment of letters in the typeface of the typewriter again producing an individualistic feature for identifying typewriter.

## 4. Some other valuable analysis of typewriting

### 4.1 determination of the date of typewritten document: -

- ✦ A fraudulent document is usually dated back to some selected time.
- ✦ A typewritten document bore a date thirty years before the time when it could have been written. To show that a document could not have been written on the date it bears is usually sufficient proof of forgery.
- ✦ It is of much importance that the typewriters of various types are not manufactured before a particular date and year. So, how is it possible that a document is available of the date in which the typewriter was not even manufactured?
- ✦ It is common knowledge that the typewriters of various kinds were not manufactured before certain dates, but it is not so well known that changes and improvements are constantly being made in the various kinds of machines in use any one of which may prove conclusively that a document could not have been written until after a certain date.
- ✦ The changes observed in the typewriters typewriting are mainly in the size, slant, alignment and the vertical spacing between the lines, the number of characters on the machine etc.
- ✦ The above mentioned points are very necessary in determining the date to which a typewritten documents correspond.

### 4.2 Identification of the machine and typist: -



As we can see here in this typewriting part of a document we can see that there is skipping of ink at many places which is not common in all typewriters. This skipping of ink is due to either miss alignment of the typeface or there may be an any other typeface defect and it may be due to lack of ink in the ribbon, but it provides an individual feature to that typewriter and due to this feature it can be identified very easily



This is how a typewriter may look like.

These are the typefaces due to their wear and tear the typewriter develops individuality.

6085 Kalaniana'ole Highway  
ani Maternity & Gynecological hospital  
6085 Kalaniana'ole Highway

This is one of the other type face defects where we can see that the upper part of the letter “gynecological hospital” is not clear.



- ✚ The identification of a typewriter is sometimes exactly parallel to the identification of an individual.
- ✚ It is also possible many times to even apprehend the typist because every typist may have some favorite phrases and line and words which he or she may use often these are some of the points that can help to detect the typist: -
  - Spelling.
  - Punctuation.
  - Use of people.
  - Division of words.
  - Choice of words.
  - Construction of sentences.
  - Observance or non-observance of grammatical mistakes.
  - The subject matter in general.
  - Arrangement of headings.
  - Arrangement of conclusion etc.

4.3 These points that we are going to discuss now may help us to determine the typewriter in an absolutely specified manner: -

- ✚ The type bar is of light metal and if someone out of the keys is slightly out of order then it may result in the miss alignment of the typebar and this feature will be indicated in the typewriting is available for identification.
- ✚ Most often the typewritten documents shows uniformity in matter, indentations etc. but it also often happens due to defect in the ribbon and due to deposition of the dirt that the typewriter indentations are not appropriate.
- ✚ The dirt which gets deposited in the typewriters may get adhered to the base of the characters and may cause some problems in the punching of the characters.
- ✚ It is not at all possible to re-insert a paper in the machine so exactly as to make the subsequently typed matter bear an exact relation to the preceding typed lines.
- ✚ The identity of a machine on which two letters for instance have been type written would not by itself show that the writer of the two letters is one and the same person. But such conclusion may only be drawn from the additional evidences like external circumstances of the case etc.

## 5. Summary

- ✚ In the modern world of printers, scanners and the Xerox machine; typewriter has been able to keep a special seat reserved for it. Since all the important documents pertaining to property and the important transaction papers etc. all are typewritten, so there are more chances of the typewriter being one of the major evidences in most of the cases involving forgery of documents being specifically typewritten.
- ✚ Any defect in the machine either in the alignment of the base line or the bruising of the letters all defects can be used for individualization. There are number frauds which can take place by using typewriters and most of the cases are related to property.
- ✚ There is much different type of typewriters which are present in the modern world and there are different companies which own these typewriters.
- ✚ Systems of typewriter: -
  - Touch system.
  - Sight system.
- ✚ Important characteristics which should be mentioned for analyzing the typewriter:
  - - Slant.
    - Size.
    - Style.
    - Alignment etc.
- ✚ A fraudulent document is usually dated back to some selected time.
- ✚ A typewritten document bore a date thirty years before the time when it could have been written. To show that a document could not have been written on the date it bears is usually sufficient proof of forgery.
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