



GRC 101
INTRODUCTION TO
GRAPHIC COMMUNICATIONS

TYPE CLASSES AND LETTER FORMS

Information
Sheet No.

206

In the first 500 years after Johann Gutenberg was credited with the invention of movable type, the process of "setting" type changed very little. Each individual letter character was placed, or "set," one at a time, by hand, into position, then secured for printing.

Ottmar Mergenthaler mechanized the process with his invention of the Linotype machine.

A keyboard, similar to the one used on office "typewriter" machines was used to select, release and assemble individual letter character matrices (molds) into lines of designated length.

Using metal "spacers", the line was then expanded (justified) to the pre-specified length, then moved into a casting mechanism which molded the line "slug" from hot liquid metal.

In 1950 a machine called the *Fotosetter* was introduced by the Intertype Corporation. It was still mechanical in nature, and basically an adaptation of Intertype's own hot metal line casting machine. Instead of a letter mold, the matrices contained a film negative of the type face character. Since then, Phototypesetting has rapidly

progressed through four generations of development to transform what was once a hand, then a mechanical process into a highly sophisticated, computerized, electronic technology.

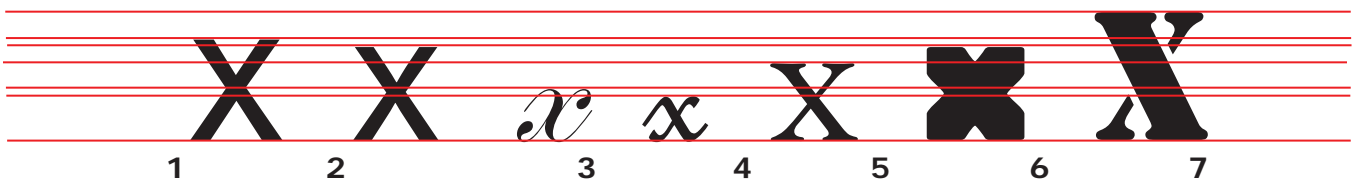
THE ANATOMY OF TYPE

The three main parts of letters are the ascenders, descenders and the "x" height. It is the lower case "x" height rather than the designated body size, or the length of the ascenders and descenders that conveys the true "visual" size of a type face. Each of the following lower case x's are the same size of type; they are all are 7236 points in size:

Note the extreme differences in the relative height of the lower case x. If a type has a small x-height, it will generally require considerably less leading (line spacing) in a given size. It also may have to be set in a larger size than would be expected to have the same visual impact. It is purely a design decision.

Standard type face sizes range from 4 point up to 120 point. A *font* of type consists of a complete assortment of all the characters, numbers and punctuation marks of any one size and style of type.

X-HEIGHT COMPARISON OF DIFFERENT FACES IN THE SAME SIZE



FROM LEFT TO RIGHT THE LOWER CASE "X'S ARE (1) ARIAL, (2) BERNHARD MODERN, (3) EDWARDIAN SCRIPT, (4) FRENCH SCRIPT, (5) GOUDY OLD STYLE, (6) BERLIN SANS AND (7) STENCIL. (ALL SET 72 PT.)

TYPE FACE IDENTIFICATION AND CLASSIFICATION

There are thousands of different typeface designs in use with new ones being introduced every day. Old typefaces are being revived. While there are many different approaches to the classification of typefaces by separate categories or families, none is completely precise or exact.

This is because the differences in typeface designs are, in many instances, very subtle.

The breakdown shown on the next page is one generally accepted standard for the identification of type family design characteristics. It is not definitive and is subject to interpretation (and rejection) by others.

Basically there are six real classes of type.

Italics and bold face versions of faces are considered font family *variants* and not categorized by themselves.

Traditionally, type is often classified as follows:

1. ***Gothic, Black Letters or Text.***
2. ***Scripts (cursive & incursive).***
3. ***Roman (Serif) Letters.***
4. ***Sans Serif Letters.***
5. ***Decorative, display or novelty Letters.***
6. ***Square Serif Letters.***

Although some text books indicate that italics and dot matrix are “classes” of type, most typographers are not in agreement.

Italics are most generally considered to be a member of a family in one of the six classes mentioned here. They usually are not considered any more of a “class” than “boldface”, “Extended”, or other basic type style variants.

Dot matrix is never considered a true “class” by itself. It is merely trying to mimic true cut type forms with a series of dots—hardly a simple task, and certainly a reproduction problem—but one not seriously affecting basic type design, merely letter quality.

Of the six preferred classes of type only the Decorative or Novelty class can claim to be a new world invention. The other five are all of European origin.

EXAMPLES OF THE SIX CLASSES OF LETTER



1

Gothic,
Blackletter or
Text Face



2

Sans Serif
Face



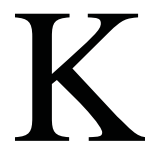
3

Script Face



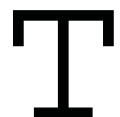
4

Decorative,
Novelty or
Display Face



5

Roman or
Serif Face



6

Square or
Slab Serif
Face

The above examples are all set 72 pt. (1) Old English, (2) Franklin Gothic Heavy, (3) French Script, (4) Sydney, (5) Times New Roman, and (6) Courier.

A Note about Script Types

Script Letter Forms have two subclassifications worth noting: *cursive* and *incursive*. Cursive indicates that the letter form is of the written hand, that is, meant to mimic the conventional handwritten letter forms.

Cursive Script Letter Forms

(NOTE THAT THE LETTERS ARE CURSIVE SCRIPT STYLE AND DO CONNECT)

Incursive Script Letter Fo

(NOTE THAT THESE INCURSIVE LETTERS ARE STILL SCRIPT STYLE BUT DO NOT CONNECT)

Incursive indicates that the cursive letter forms are connected as in handwriting. Thus there are two distinctive forms of script letter types. The first one (*Cursive*) by design, follows handwritten letter shapes but does not connect consecutive letters. The second,

Incursive uses handwriting letter forms but, in addition, are designed to smoothly connect most, if not all, consecutive letter forms. (See the examples above).

Remember, you write *incursively* using *cursive* letter forms.