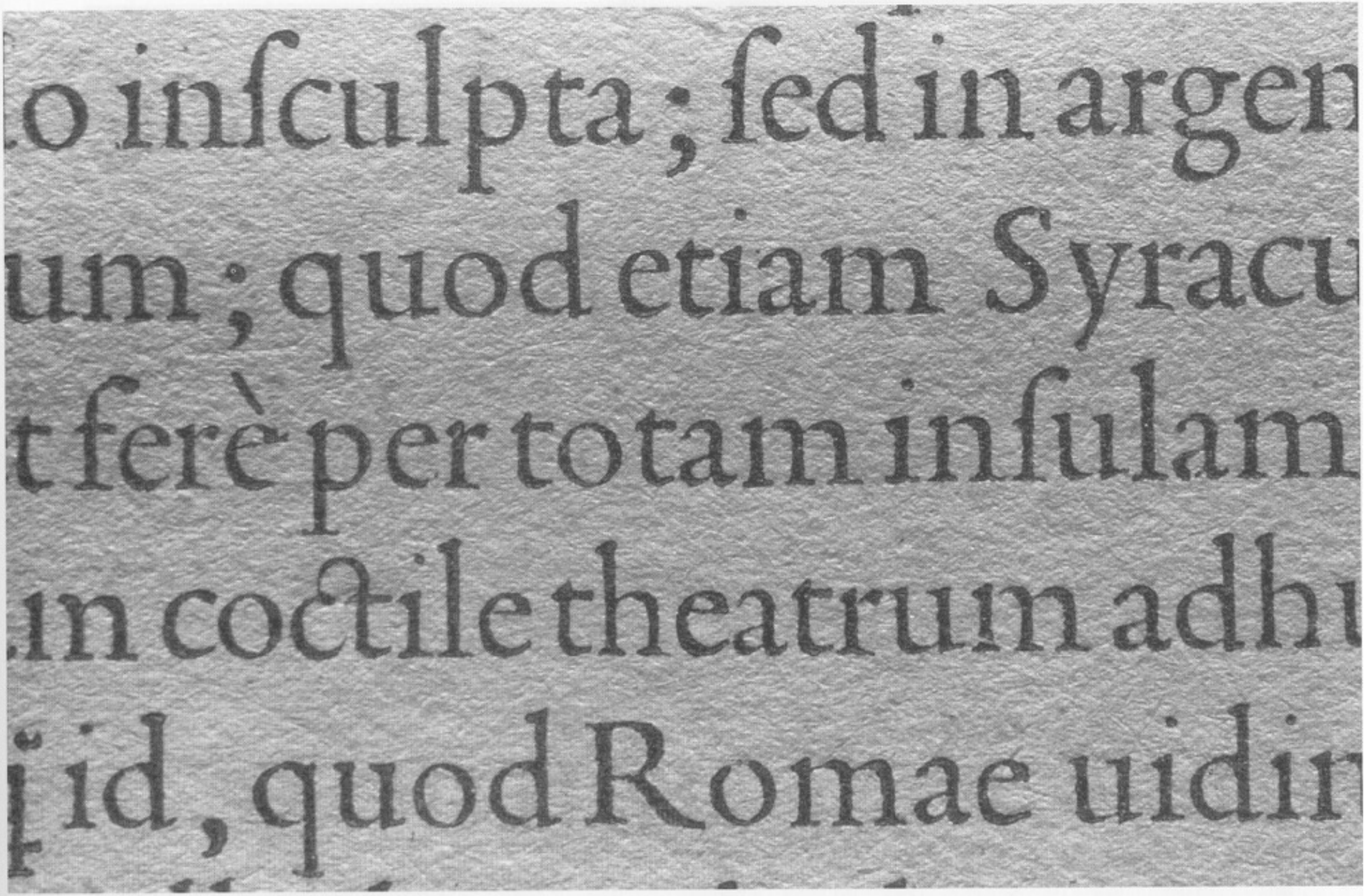
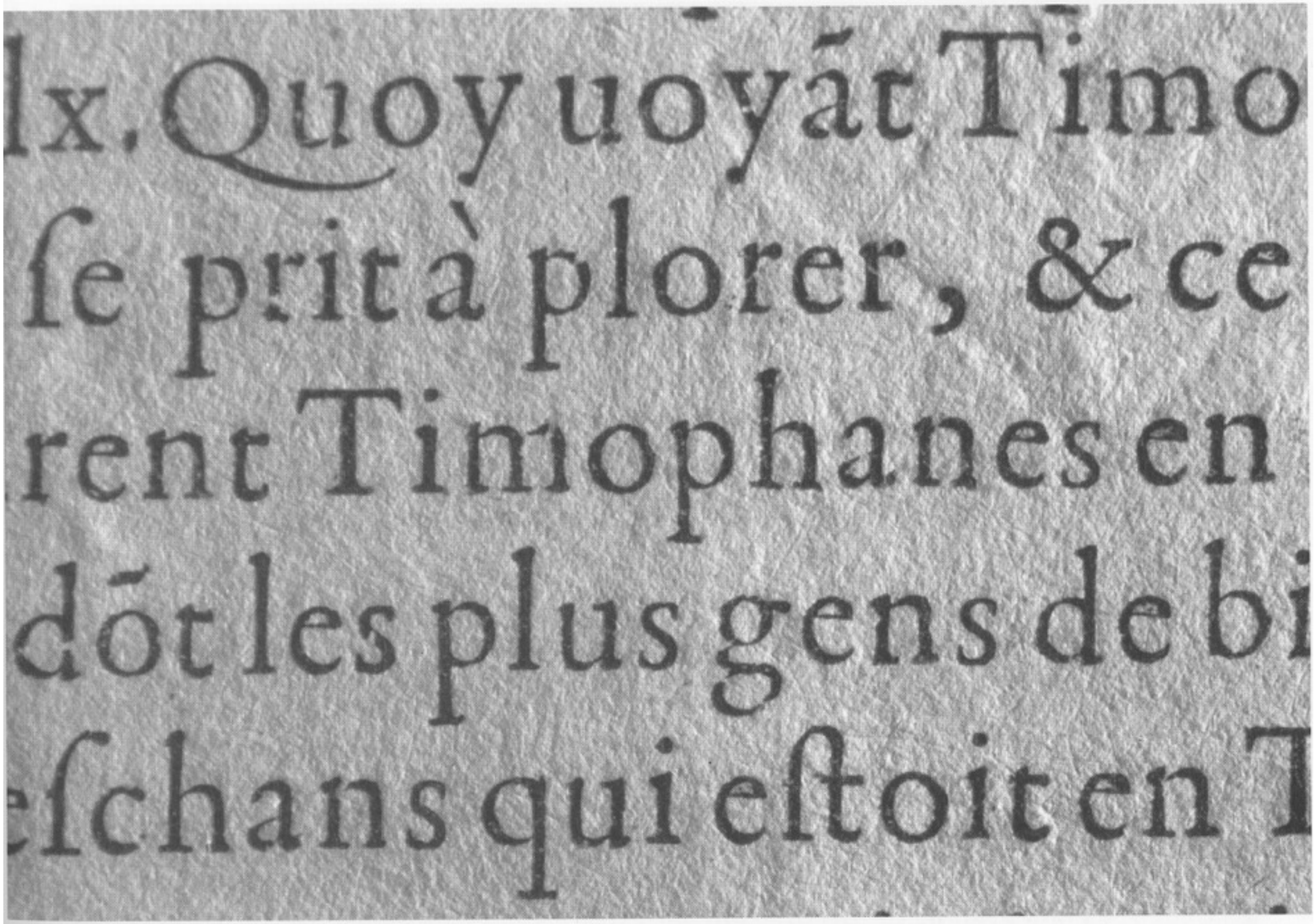
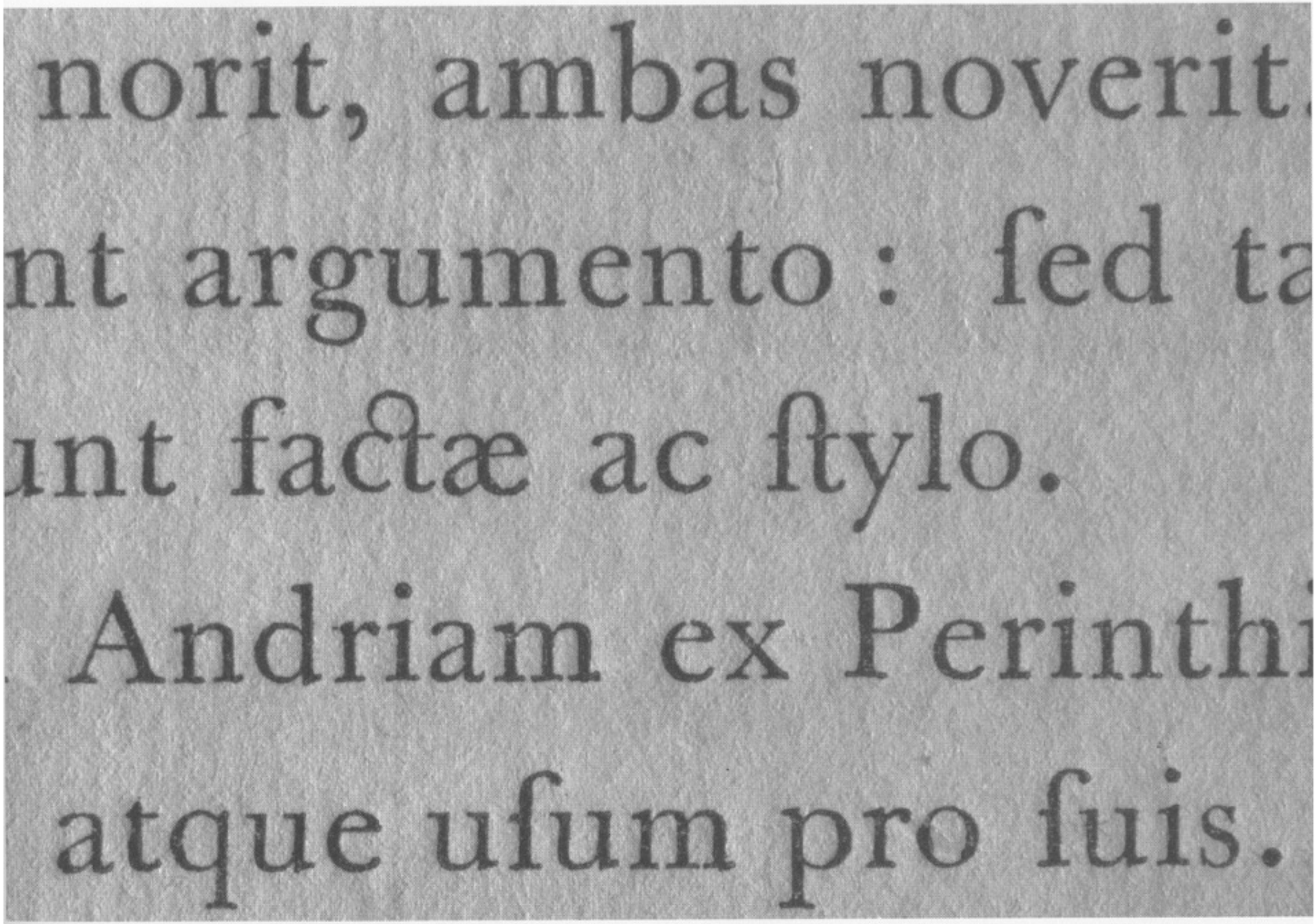

o inſculpta; ſed in argen
um; quod etiam Syracu
t ferè per totam inſulam
in coctile theatrum adhu
id, quod Romae uidi


lx. Quoy uoyãt Timo
fe prit à plorer, & ce
rent Timophanes en
dõt les plus gens de bi
fchans qui eſtoit en T

ebetur magnus patinæ fu
rgillam atque rotam citi
empore jam, Cæfar, figu
icit digna viro fententia.
uxuriam imperii veteren


norit, ambas noverit.
nt argumento : fed ta
unt factæ ac ftylo.
Andriam ex Perinthi
atque ufum pro fuis.

gravi jam dudum sauci
venis, et cæco carpitur
virtus animo, multusqu
os: hærent infixi pector
nec placidam membris d

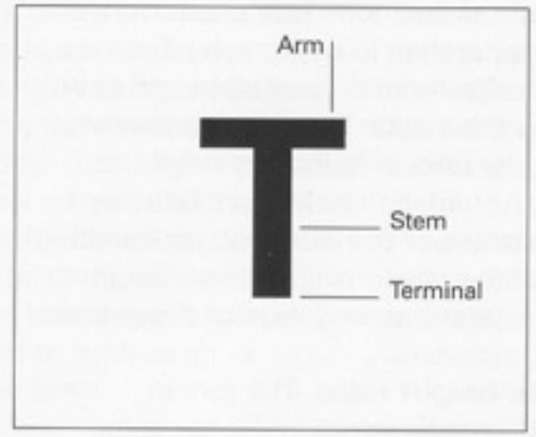
n hic ego sum: nam tuta

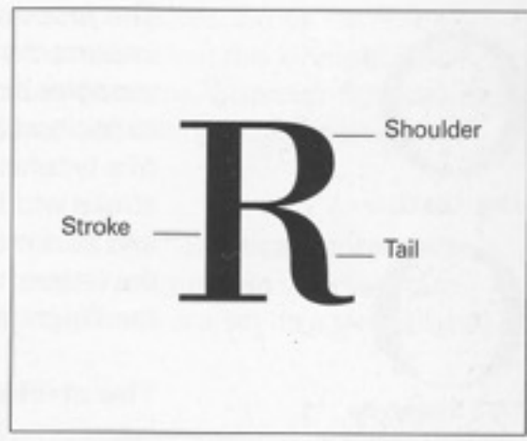
es deficiunt, satis inter v

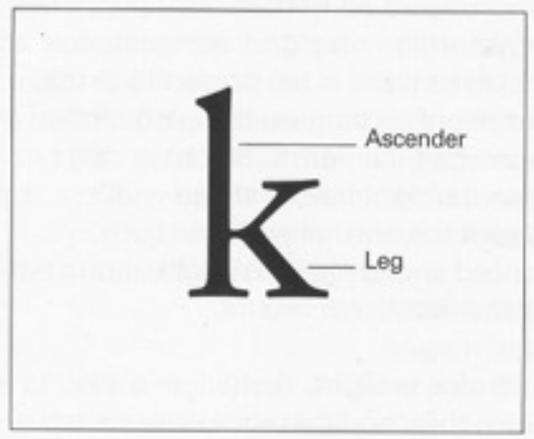
ubi quid melius contingi

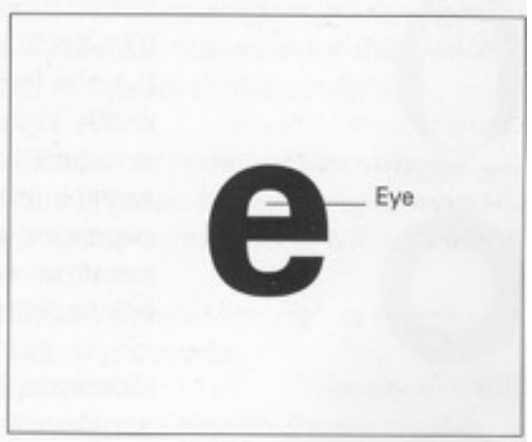
ere, et solos aio bene viv

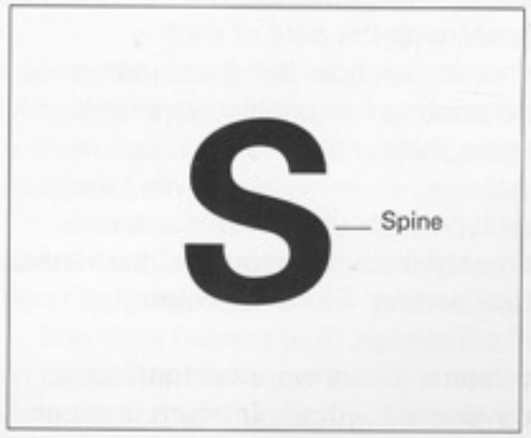
tur nitidis fundata pecu

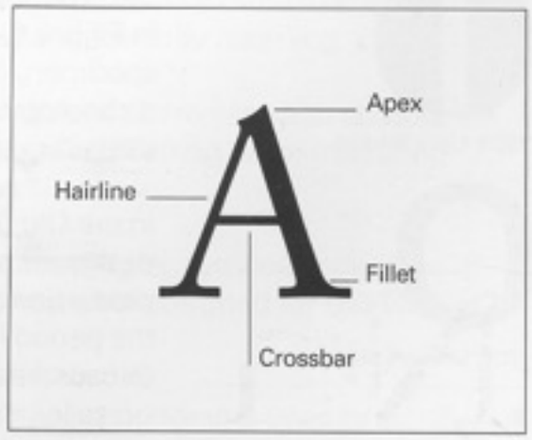

Arm
Stem
Terminal

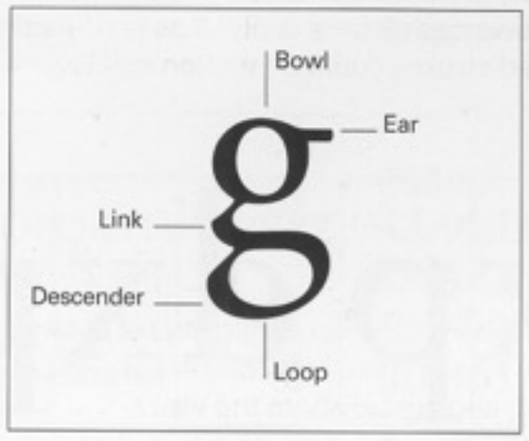

Shoulder
Stroke
Tail

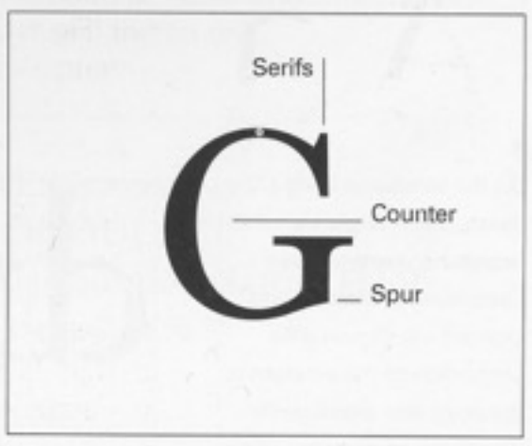

Ascender
Leg


Eye


Spine


Apex
Hairline
Fillet
Crossbar


Bowl
Ear
Link
Descender
Loop


Serifs
Counter
Spur

4.

5.

1499 Old Style

1757 Baskerville

1793 Bodoni

1816 First sans serif

c. 1928 Ultra Bodoni

1957 Univers 55

6.

Proportions of the letterform

The proportions of the individual letterform are an important consideration in typography. Four major variables control letterform proportion and have considerable impact upon the visual appearance of a typeface: the ratio of letterform height to stroke width; the variation between the thickest and thinnest strokes of the letterform; the width of the letters; and the relationship of the x-height to the height of capitals, ascenders, and descenders.

The stroke-to-height ratio. The roman letterform, left, has the stroke-width-to-capital-height proportion found on Roman inscriptions (Fig. **5**). Superimposition on a grid demonstrates that the height of the letter is ten times the stroke width. In the adjacent rectangles, the center letter is reduced to one-half the normal stroke width, and the letter on the right has its stroke width expanded to twice the normal width. In both cases, pronounced change in the weight and appearance of the letterform occurs.

Contrast in stroke weight. A change in the contrast between thick and thin strokes can alter the optical qualities of letterforms. The series of *O*s in Figure **6**, shown with the date of each specimen, demonstrates how the development of technology and printing has enabled typeface designers to make thinner strokes.

In the Old Style typography of the Renaissance, designers attempted to capture some of the visual properties of pen writing. Since the writing pens of the period had a flat edge, they created thick and thin strokes. *Stress* is the term to define this thickening of the strokes, which is particularly pronounced on curves. Note how the placement of weight within the Old Style *O* creates a diagonal axis. As time has passed, type designers have been less influenced by writing.

By the late 1700s, the impact of writing declined, and this axis became completely vertical in many typefaces of that period. In many of the earliest sans-serif typefaces, stress disappeared completely. Some of these typefaces have a monoline stroke that is completely even in weight.

Expanded and condensed styles. The design qualities of the typographic font change dramatically when the widths of the letterforms are expanded or condensed. The word *proportion*, set in two sans-serif typefaces, demonstrates extreme expansion and condensation (Fig. **7**). In the top example, set in Aurora Condensed, the stroke-to height ratio is one to nine. In the bottom example, set in Information, the stroke-to-height ratio is one to two. Although both words are exactly the same height, the condensed typeface takes up far less area on the page.

X-height and proportion. The proportional relationship between the x-height and capital, ascender, and descender heights influences the optical qualities of typography in a significant way. The same characters are set in seventy-two-point type using three typefaces with widely varying x-heights (Fig. **8**). This example demonstrates how these proportional relationships change the appearance of type. The impact of x-height upon legibility will be discussed in chapter four.

8.
On the same-size body (72 point), the x-height variation between three typefaces – Garamond 3, Bodoni, and Univers – is shown. The proportion of the x-height to the point size significantly affects the appearance of type.

Historical classification of typefaces

An infinite variety of type styles is available today. Digital typography, with its simple and economical introduction of new typefaces, has made the entire array of typefaces developed over the centuries available for contemporary use. Numerous efforts have been made to classify typefaces, with most falling into the following major categories. Some classification systems add a decorative, stylized, or novelty category for the wide range of fanciful type styles that defy categorization.

Old Style

Old Style type began with designs of the punchcutter Francesco Griffo, who worked for the famous Venetian scholar-printer Aldus Manutius during the 1490s. Griffo's designs evolved from earlier Italian type designs. His Old Style capitals were influenced by carved Roman capitals; lowercase letters were inspired by fifteenth-century humanistic writing styles, based on the earlier Carolingian minuscules. Old Style letterforms have the weight stress of rounded forms at an angle, as in handwriting. The serifs are bracketed (that is, unified with the stroke by a tapered, curved line). Also, the top serifs on the lowercase letters are at an angle.

&

Italic

Italic letterforms slant to the right. Today, we use them primarily for emphasis and differentiation. When the first italic appeared in the earliest "pocket book," printed by Aldus Manutius in 1501, it was used as an independent typestyle. The first italic characters were close-set and condensed; therefore, Manutius was able to get more words on each line. Some italic styles are based on handwriting with connected strokes and are called scripts.

&

Transitional

During the 1700s, typestyles gradually evolved from Old Style to Modern. Typefaces from the middle of the eighteenth century, including those by John Baskerville, are called Transitional. The contrast between thick and thin strokes is greater than in Old Style faces. Lowercase serifs are more horizontal, and the stress within the rounded forms shifts to a less diagonal axis. Transitional characters are usually wider than Old Style characters.

&

Modern

Late in the 1700s, typefaces termed Modern evolved from Transitional styles. These typefaces have extreme contrasts between thick and thin strokes. Thin strokes are reduced to hairlines. The weight stress of rounded characters is vertical. Serifs are horizontal hairlines that join the stems at a right angle without bracketing. The uppercase width is regularized; wide letters such as *M* and *W* are condensed and other letters, including *P* and *T*, are expanded. Modern-style typefaces have a strong geometric quality projected by rigorous horizontal, vertical, and circular forms.

Egyptian

In 1815, the English typefounder Vincent Figgins introduced slab-serif typestyles under the name Antique. At the time, there was a mania for ancient Egyptian artifacts, and other typefounders adopted the name Egyptian for their slab-serif designs. These typestyles have heavy square or rectangular serifs that are usually unbracketed. The stress of curved strokes is often minimal. In some slab-serif typefaces, all strokes are the same weight.

Sans Serif

The first sans serif typestyle appeared in an 1816 specimen book of the English typefounder William Caslon IV. The most obvious characteristic of these styles is, as the name implies, the absence of serifs. In many sans serif typefaces, strokes are uniform, with little or no contrast between thick and thin strokes. Stress is almost always vertical. Many sans serif typefaces are geometric in their construction; others combine both organic and geometric qualities.


straight
oblique
bracketed
unbracketed
squared
rounded


wedged
concave
pointed
hairline
sans serif
hybrid stroke terminals

A ultra bold

A extra bold

A bold

A normal

A light

A extra light

A ultra light

A ultra expanded

A extra expanded

A expanded

A normal

A condensed

A extra condensed

A ultra condensed

h italic

h oblique

h script

Renaissance-Antiqua
Bembo

The uniqueness of each typeface is found in its microaesthetic details. Selection of a typeface is most strongly influenced by these details, which distinguish one typeface from another.

Baroque-Antiqua
Baskerville

Neoclassical Antiqua
Bodoni

Variation of style

Our visual environment would be unbearably dull if a single typeface were applied universally. Individual typefaces, with their different styles and particular idiosyncrasies, all contribute to the visual expressiveness of typography. Only very few of the countless "new" typefaces produced and marketed every year serve a real need and promise to stand the test of time. Invariably they look dated after a few uses, and are soon superseded by a new crop.

Designers, in their quest for originality, often become preoccupied, even obsessed, with typefaces, with the unfortunate result that typefaces are used to mask weak ideas or are degraded into meaningless decoration. Typically, however, a general audience is more interested in content than in the typeface used. If the goal of typographic design is to communicate information, the audience is best served by a simple, classical typeface.

Technological advances and changes in taste will undoubtedly influence letterform design in the future. However, true developments are more than microaesthetic changes in existing styles. Mere embellishments on basic letterforms do not constitute new design, and actually work against the precepts of typography to communicate information clearly.

Most of the typefaces in use at present were created for printing on paper. On the screen or through electronic transmittal, most typefaces lose their refinements of detail and bear no resemblance to the original. Electronic media require new typefaces developed with their specific technical conditions in mind.

Slab serif
Rockwell

Rafopkz

Sans serif
Gill

Rafopkz

Sans serif
Meta

Rafopkz

Characteristics of typefaces classified by five categories of styles. The date indicates when the typeface was first produced for metal or computer composition.

The subtle details of the original design are often lost when a typeface is re-issued in digital form. In selecting a typeface, it is best to choose the version of the date closest to the original design.

Renaissance-Antiqua

Strong modulation of curves
Bracketed serifs
Oblique ascender terminals
Oblique curve axis

Caslon, 1916
Goudy, 1916
Janson, 1919
Garamond, 1922
Bembo, 1929
Times, 1931
Van Dijck, 1935
Sabon, 1965

Baroque-Antiqua

Moderate modulation of curves
Bracketed serifs
Oblique ascender terminals
Oblique curve axis

Baskerville, 1923
Fournier, 1925
Bell, 1931

Neoclassical Antiqua

Strong modulation of curves
Straight hairline serifs
Horizontal ascender terminals
Vertical curve axis

Century, 1894
Walbaum, 1918
Bodoni, 1921
Centennial, 1986

Slab serif

Subtle modulation of curves
Bold straight or bracketed serifs
Horizontal ascender terminals
Vertical curve axis

Memphis, 1929
Beton, 1930
Rockwell, 1934
Courier, 1945
Serifa, 1969

Sans serif

Subtle modulation of curves
Vertical curve axis

Akzidenz Grotesk, 1896
Franklin Gothic, 1903
Monotype Grotesk, 1926
Gill Sans, 1927
Futura, 1927
Helvetica, 1957
Univers, 1957
Syntax, 1968
Frutiger, 1976
Bell Centennial, 1978
Formata, 1984
Meta, 1991