

## 8. Typography

### Synopsis

This module introduces calligraphy, the basic principles of typography, and applications of typography.

### Lectures

- 8.1 Calligraphy
- 8.2 Basic Principles of Typography
- 8.3 Typography Applications

## 8.2 Basic Principles of Typography

Typography is the study of typefaces, their design and their usage. The culture of communicating through the written word is used all over the world. Everyday thousands of newspapers, books, posters, leaflets are printed and read. This makes the design of letterforms an extremely important area.

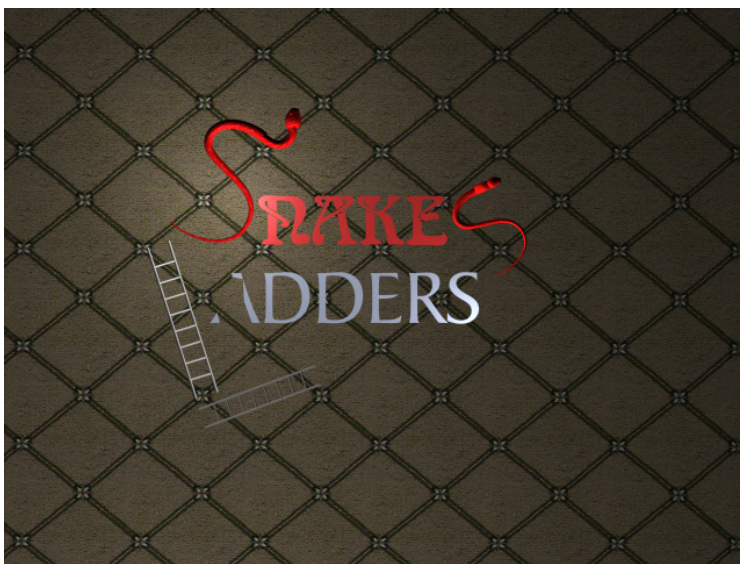


Fig. 8.2.01

Typography involves the creation of letterforms for use in print publications (newspapers, books, magazines etc.), digital screens (computers, cellphones, tablets etc.) and various other media where type appears as a designed entity. It requires not just the design of all the characters that appear in a certain language, but the combinations of letterforms, their spacing and joineries in order to achieve the desired ends (most often legibility and typographic elegance).

t<sub>y</sub>pog<sub>r</sub>a<sub>phy</sub>

Fig. 8.2.02a

the friendly  
giant

Fig. 8.2.02b

Subaltern

Fig. 8.2.02c

Examples of Roman typography.

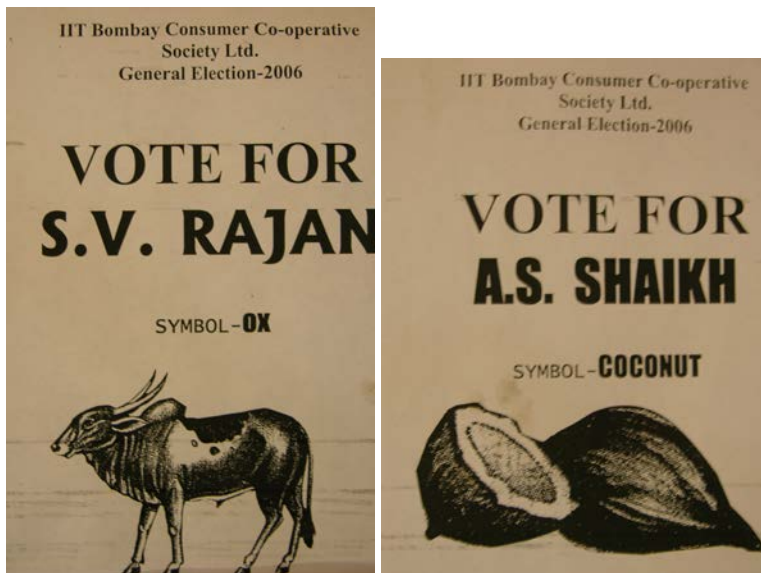


Fig. 8.2.03a

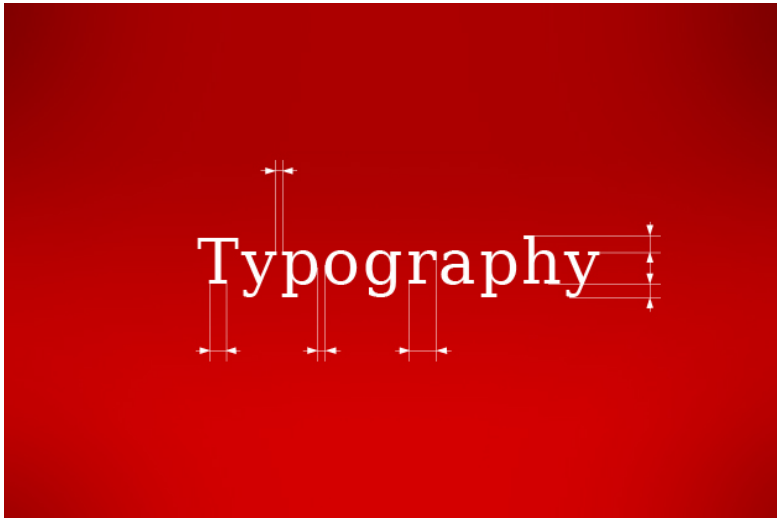


Fig. 8.2.03b

Typefaces are used by everybody, but a typographer pays special attention to the manner in which type is laid out.

### **A brief history of type design**

Potato prints made as a part of craft activity in schools closely resemble one of the earliest mechanisms for printing. Hot metal type was a technology that used individual letterforms cast in metal. These letterforms were painstakingly arranged one after the other by typesetters. Entire columns of text composed in this manner were proofed to check for errors in composing. The final page was printed using the letterpress printing machine. The composed metal type was inked through a set of rollers. The ink was then transferred to a blanket and the impression on the blanket was printed on paper.

The invention of photolithography allowed cellulose films that carried the text to expose sensitized metal plates that were then etched and used for printing. The process came to be known as the offset process.

The advent of digital technologies changed the entire approach to type design and printing. Typefaces were designed using digital tools and printed with the help of digital printers. The use of digital screens for text displays also altered the considerations that went into the design of type.

Johann Gutenberg 's printing press remained unchanged for nearly five hundred years although innovation and improvement of the press continued to happen. In the 1950s photo-typesetting and offset printing began to replace letterpress technology. The use of the computer for typesetting signaled the end of letterpress technology for printing, though enthusiasts still use it. In the late 1980s digital typesetting and laser printer combined with WYSIWYG (what-you-see-is-what-you-get) technology and desktop publishing made computer-based typesetting a near-universal phenomenon .

A generation that grew up with television, magazines, movies, computers and cellphones it is difficult to get a sense of how much of a revolution printing was. As a medium for mass replication it allowed the unprecedented spread of ideas through printed word. Martin Luther's Protestant Reformation movement was enabled by this medium. The spread of the scientific outlook was possible because of books that could be printed and distributed all over the world.

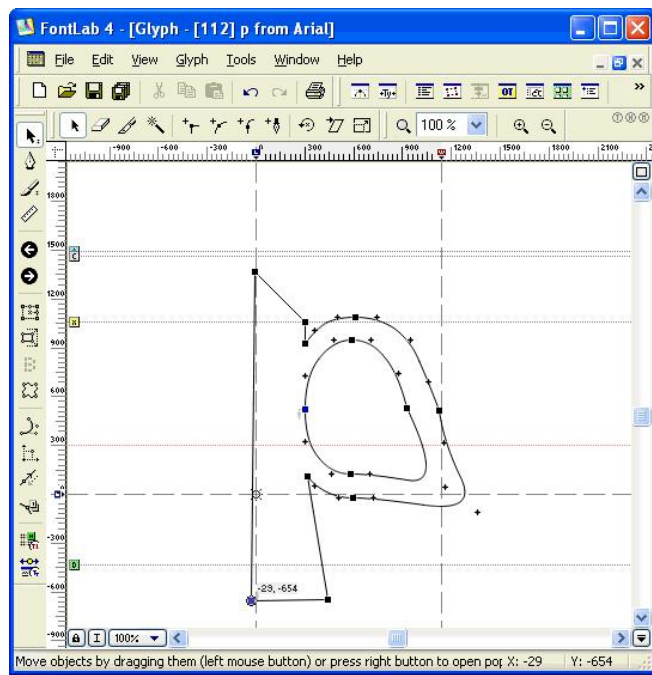


Fig. 8.2.04

Typeface design is an activity that is now done almost entirely with the help of computer software.

## Fundamental Typographic Principles

Typography exists to honour content.

The text has to be read, before it can be designed.

The relationship between the text and the other elements (photographs, captions, tables and diagram should be clear.

Typographic attention should be given to incidental details.

## Typographic Terms

**Letter space:** The space in between letters.

**Word space:** The space in between words.

**Line space:** The space in between consecutive lines of text.

**Kerning:** Altering the spaces between letters for proper visual effect.

**Leading:** The vertical distance between the baseline of one line and the baseline of the following line.

**Grey value of text:** The intensity of black (or gray) that is perceived when looking at a block of text.

**Grids:** Underlying margins and guides that serve as a basis for systematic layout.

**Serif:** A stroke added to the beginning or the end of a letter.

**Sans serif:** Without a serif.

**Weight:** The darkness of the type.

**Display Typeface:** A typeface specially designed for display purposes.

**Body text :** Continuous running text

### Serif Types

Aa Aa As Aa

Times Bodoni Garamond Slimbach

### Sans serif Types

Aa Aa As Aa

Arial Avant Garde Frutiger Myriad

### Type Weights

A A A A

Frutiger Light Regular Extra Black Ultra Black

### Type Widths

A A A

Tekto condensed Regular Extended

### Angle / Slope

A A

Normal, Italic

A A A A

Y O R P Y  
T P G A H Y

$${}_{\text{T}}\text{Y} \text{P} {}_{\text{O}}\text{G} \text{R} {}_{\text{A}}\text{P} \text{H} {}_{\text{Y}}$$

u uu uu  
uu uu uu uu  
uu uu uu  
uuu u  
u

**IDC, IIT Bombay**

## Grouping of Letter Shapes

**Round** ceos COQS

**Vertical** ilhmnu IHMNU

**Round and vertical** abdgppqfrt BDGPR

**Vertical and Horizontal** EFLT

**Oblique** vwxy VWXY

**Oblique and Vertical** kz AKZ

## The space between words

The space between words

The space between words

Thespacebetweenwords

Loose, Regular, No word space

For easy and tranquil reading we need to close up distracting gaps and open up dark and narrow junctions.

## Alignment: Left Aligned, Centre Aligned, Right Aligned, Justified

### Left Aligned

Nelle Harper Lee was born on April 28 1926  
in Monroeville Alabama, a city of about 7,000 people  
in Monroe County, which has about 24,000 people.  
Monroeville is in southwest Alabama, about halfway  
between Montgomery and Mobile.

In the 1950s she worked as a reservation clerk with  
Eastern Air Lines and BOAC in New York City.

In order to concentrate on writing Harper Lee gave up  
her position with the airline and moved into a cold-water  
apartment with makeshift furniture.

### Centred

Nelle Harper Lee was born on April 28 1926  
in Monroeville Alabama, a city of about 7,000 people  
in Monroe County, which has about 24,000 people.  
Monroeville is in southwest Alabama, about halfway  
between Montgomery and Mobile.

In the 1950s she worked as a reservation clerk with Eastern Air Lines and BOAC in New York City.

In order to concentrate on writing Harper Lee gave up her position with the airline and moved into a cold-water apartment with makeshift furniture.

## Right Aligned

Nelle Harper Lee was born on April 28 1926 in Monroeville Alabama, a city of about 7,000 people in Monroe County, which has about 24,000 people. Monroeville is in southwest Alabama, about halfway between Montgomery and Mobile.

In the 1950s she worked as a reservation clerk with Eastern Air Lines and BOAC in New York City.

In order to concentrate on writing Harper Lee gave up her position with the airline and moved into a cold-water apartment with makeshift furniture.

## Justified / Boxed

Nelle Harper Lee was born on April 28 1926 in Monroeville Alabama, a city of about 7,000 people in Monroe County, which has about 24,000 people. Monroeville is in southwest Alabama, about halfway between Montgomery and Mobile.

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In order to concentrate on writing Harper Lee gave up her position with the airline and moved into a cold-water apartment with makeshift furniture.

**Note:** Unless the column width is long enough to accommodate sufficient number of characters per line, justified / boxed text can have irregularly spaced words, leading to an undesirable visual appearance.

## Length of lines

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## Rules

Hairline 0.5 pt 1pt 2 pt 20 pt

## Signs and Symbols

