

Visual Design for Interactive Media

Type

Masood Masoodian, University of Waikato

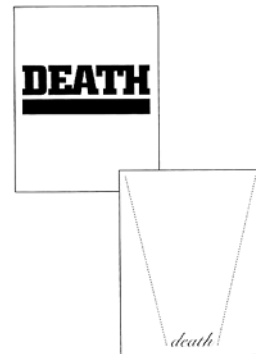
The role of the type

- **Type** plays different **roles** in visual design
 - textual content
 - information that must be readable
 - collective shape
 - all the text together
 - purely visual element
 - shape of the type
- The **visual aspects** of the type can be used to **convey the meaning** of the written text it represents
 - shape of the type supporting the meaning of the text

Visual Design for Interactive Media

2

peace war
peace war
peace war



Terminology

- **Typeface** (font): design of a **single set** of letterforms, numerals, and special characters
 - unified by **consistent visual properties**
- **Type styles**: different modifications of a typeface which retain its **essential visual properties**
 - e.g. roman, bold, italic, condensed, etc.
- **Type family**: the **complete range** of all the variations (type styles) of a typeface design
 - including roman, italic, bold, condensed, etc.

Visual Design for Interactive Media

5

Digital fonts

- Traditional **printing press** machines used **hot metal** typefaces to print text
 - each printing machine had its own range of typefaces
- Modern computers and printers use **digital** typefaces
- There are **three main formats** for digital typefaces
 - Bitmap
 - PostScript Type
 - TrueType

Visual Design for Interactive Media

6

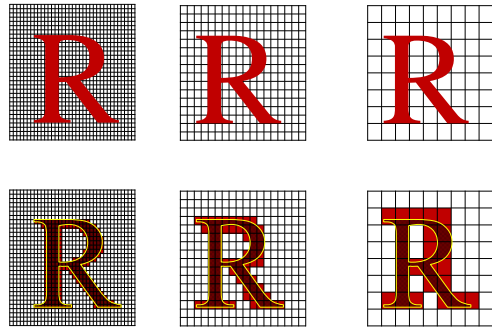
Bitmap fonts

- **Bitmap fonts** are like the actual representations of the typefaces
 - their actual images (like raster-based images)
- Bitmap fonts
 - mainly used by computer displays
 - have a fixed size and resolution

Rosebud Rosebud Rosebud

Visual Design for Interactive Media

7



PostScript fonts

- **PostScript fonts** describe the outline of typefaces
 - similar to vector-based images
 - are scalable (i.e. their size can be changed)
 - are device independent
 - can be used on different computers, printers, etc.
 - unlike bitmaps which are device dependant



Visual Design for Interactive Media

9

TrueType fonts

- **TrueType fonts** also describe the outline of typefaces, but using a **different format** to PostScript fonts
 - are also scalable
 - are also device independent



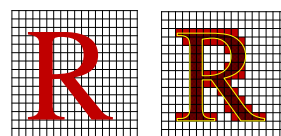
Visual Design for Interactive Media

10



Screen fonts

- TrueType and PostScript fonts **can't be displayed** directly on a computer display **screen**
 - need to be converted to bitmaps
 - may not look good at low resolutions

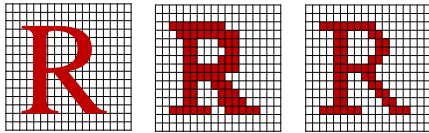


Visual Design for Interactive Media

12

Screen fonts

- **Hints** are special **instructions** used for displaying fonts at low resolutions
 - aim to improve how the fonts look at low resolution



Visual Design for Interactive Media

13

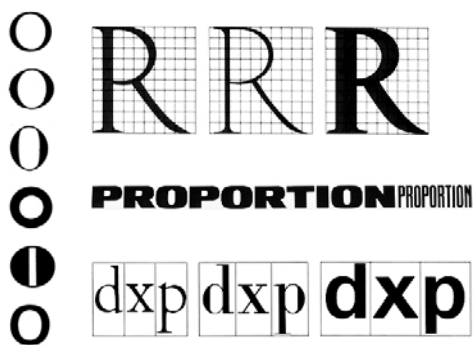
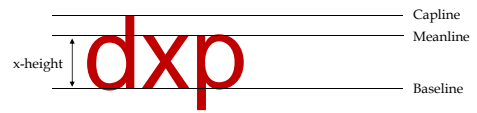
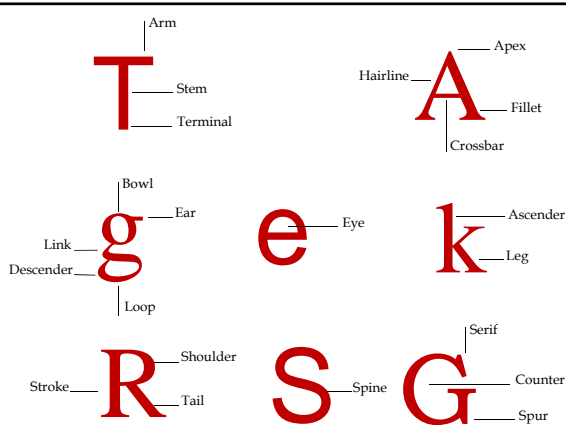
Shape of letters

- The alphabet is a series of **visual signs**
 - each letter has a unique visual form
- Shape of the letters is likely to have evolved, based on the properties of **early writing tools**



Visual Design for Interactive Media

14



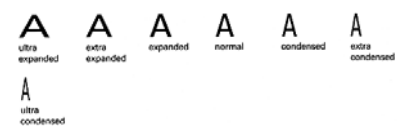
Serifs



Weight



Width



Posture	<i>h</i> italic	<i>h</i> oblique	<i>h</i> script		
Contrast	A high contrast	A medium contrast	A low contrast	A no contrast	
x-height	d extra tall	d tall	d medium	d short	d extra short
Ascender Descender	dp extra long	dp long	dp medium	dp short	dp extra short
Stress	O left-angled	O vertical	O right-angled		

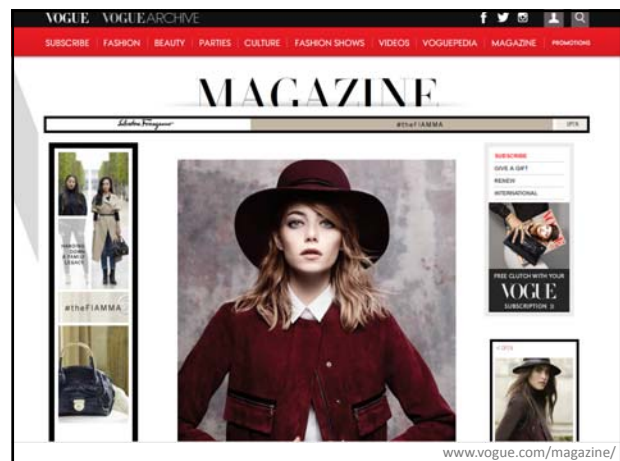


Classification of typefaces

- **Old style:** based on Roman chisel-edged letters
Times New Roman, Palatino Linotype
- **Transitional:** similar to old style with more contrast between thin and thick strokes
Baskerville, Century Schoolbook
- **Modern:** mechanical drawing rather than chisel-edged letters with extreme thin and thick contrast
Bodoni MT, Modern No. 20

Visual Design for Interactive Media

21



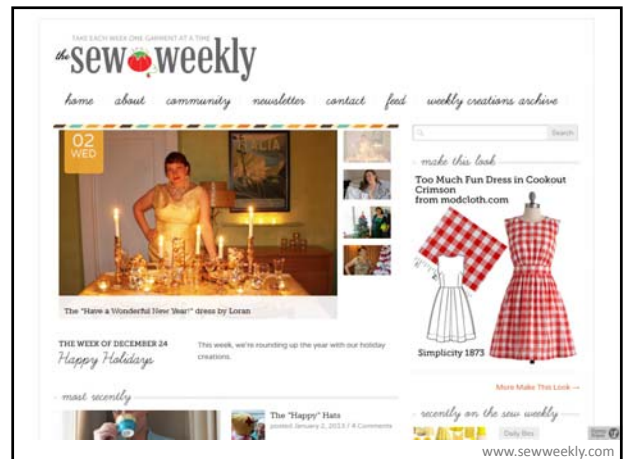
Classification of typefaces

- **Slab serif:** heavy and slab like serifs with minimal contrast between thin and thick lines
Rockwell
- **Sans serif:** without serifs and no thin and thick lines
Helvetica, Arial, Tahoma
- **Script:** resemble handwriting, giving a human touch
Brush Script, Freestyle Script, Bradley Hand ITC

Visual Design for Interactive Media

23





Web browser-safe typefaces

Only a few fonts are **common** to most systems or browsers

Arial
 Arial Black
 Comic Sans MS
 Courier New
 Georgia
 Impact
 Times New Roman
 Trebuchet MS
 Verdana

Visual Design for Interactive Media

27

Typefaces for the web

- The use of different fonts used to be **limited** in **HTML**
 - use of browser-safe fonts
 - not many exciting options available
 - every page ends up using the same combination of fonts
 - text-image replacement
 - only good for replacing some text (e.g. headings)
 - images may not necessarily get downloaded
 - not readable to people with vision disabilities
 - not readable by search-engines, etc.

Visual Design for Interactive Media

28



Typefaces for the web

- CSS provides **more options** for the use of fonts
- A **font stack** helps the browser to choose an available font, based on an ordered list of options
 - font-family: "trebuchet ms", arial, helvetica, sans-serif;
 - always specify a generic font family option
 - serif, sans-serif, cursive (script), fantasy (novelty), monospace
- It is possible to use **downloadable web fonts**
 - using @font-face option

Visual Design for Interactive Media

30

