WORDS ON A MAP | FONTS

Cartographic Design & Principles| Winter 2018

Words on a map

Everything on the Earth has a name

Words on a map

Names on a map, make it a map

Otherwise it is a picture, photograph or design

Words on a map

Assigning names to a place can be contentious

Indigenous place names v. Colonialist place names

Words as symbols on a map

1. Helps the reader find features
2. Are easier to find (usually larger than symbols)
3. Have a predictable relationship with the symbol

There are words everywhere we look – what makes words on a map unique to words in other places?

1. Text is usually only one or two words long
2. Words are placed with extreme space constraints
3. Typical map reader is not always familiar with all feature names on the map
4. Text is displayed in a small size
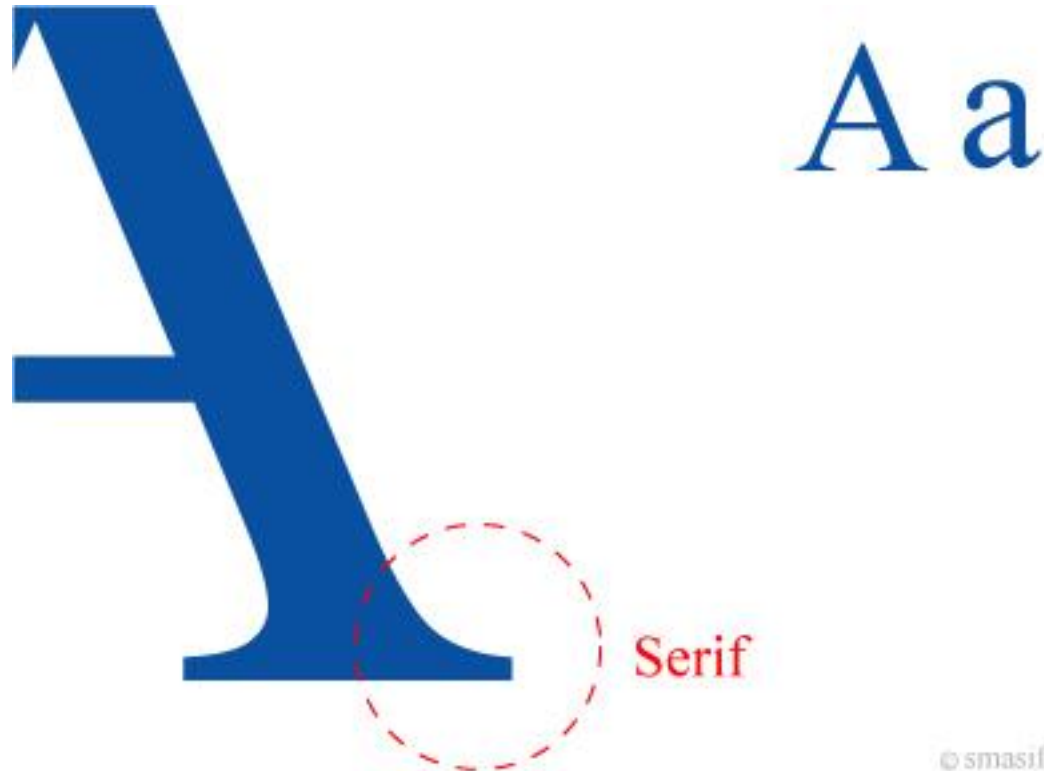5. Labels need to reflect 'mood' of the map

Type Anatomy

Font | Typeface

- A set of letters & numbers with a unique design
  - Font is a subset that includes a unique designs & size
  - Often used interchangeably
  - Examples:
    Times New Roman
    Lucida Sans
    American Typewriter

Serif | Sans Serif

- Serifs are finishing strokes added to the ends of letters

Serif | Sans Serif

The small decorative pieces on the ends of each character are called **Serifs**

Serif

San Serif

Serif | Sans Serif

Baskerville	Arial
Bookman Old Style	Century Gothic
Courier New	Comic Sans
Garamond	Gill Sans MT
Georgia	**Impact**
Palatino	Lucida Sans Unicode
Times New Roman	Tahoma
	Trebuchet MS
	Verdana

Serif | Sans Serif

- When to use Serif
  - Reading map from close distances on high-resolution print outs
  - Illustration v. Illustration
- When to use Sans Serif
  - Viewing from computer monitor (web maps)
  - Short Text blocks (title) on a poster or reading a map from a distance

Decorative Fonts

- Aka "display font" is a style that is reminiscent of a particular time in history, place, people or some other style category

- Used to allude to mideval knights, Celtic history, space, science fiction, etc.

- Used in mapping when the feeling they evoke match the subject of the map

Olde English Lettering

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 '@#$%^&*()\{};:",./<>?

SPACE AGE FONTS COLLECTION

ROYAL NONESUCH

Script

- Aka "handwriting font" contain extra flourishes such as curls at the end of letters or mimic calligraphy or handwriting cursive
- Somewhat decorative in style
- Lend a more elegant, formal feeling to text
- Hard to read in large quantity
- Should be reserved for small bits of text

Script

- Could be used on a map that has a lot of features requiring differentiation
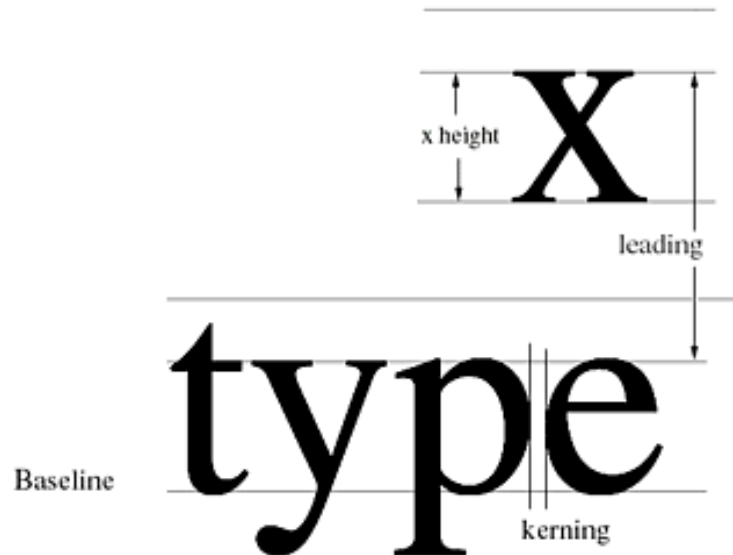- A few examples

Brush Script MT

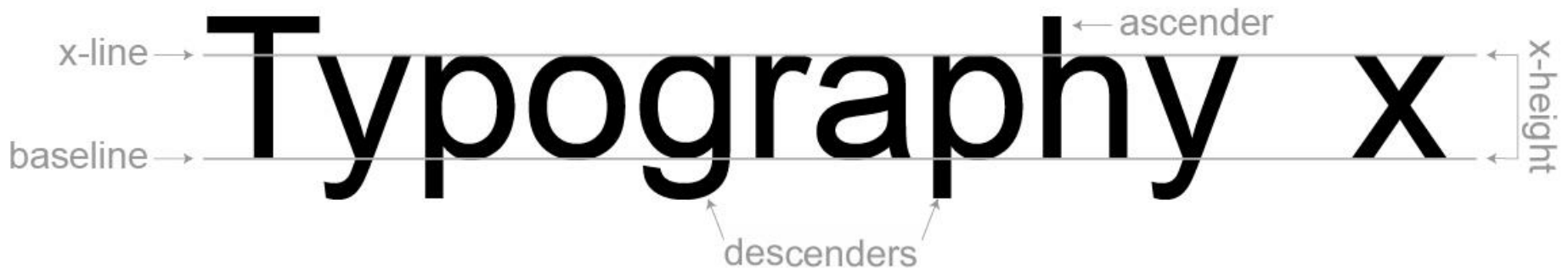*Edwardian Script ITC*

Mistral

Matura MT Script Capitals

X-Height

- The height of the most compact letters in a typeface, such as a, o or e
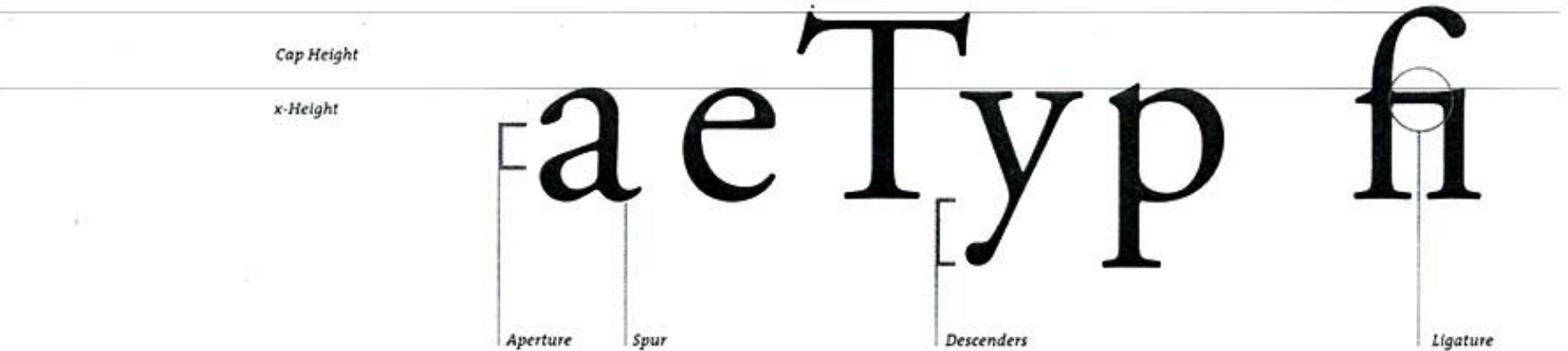- (generally) the greater the x-height, the easier to read

Ascenders | Descenders

- Ascenders – the portion of certain letters that rises above the x-height, such as *k* or *f*

- Descenders – the portion of certain letters that fall below the x-height, such as *p* or *g*

Letterform Anatomy

Ascent Line

Cap Line

Mean Line

Baseline

Descent Line

Stem or Main Stroke · Crossbar · Tittle · Bowl · Ascender · Ear · Counter · Shoulder · Terminal · Leg

H t i Q f g x R

Crossbar · Serif · Tail · Loop or Bowl · Juncture or Joint

Cap Height

x-Height

a e T y p fi

Aperture · Spur · Descenders · Ligature
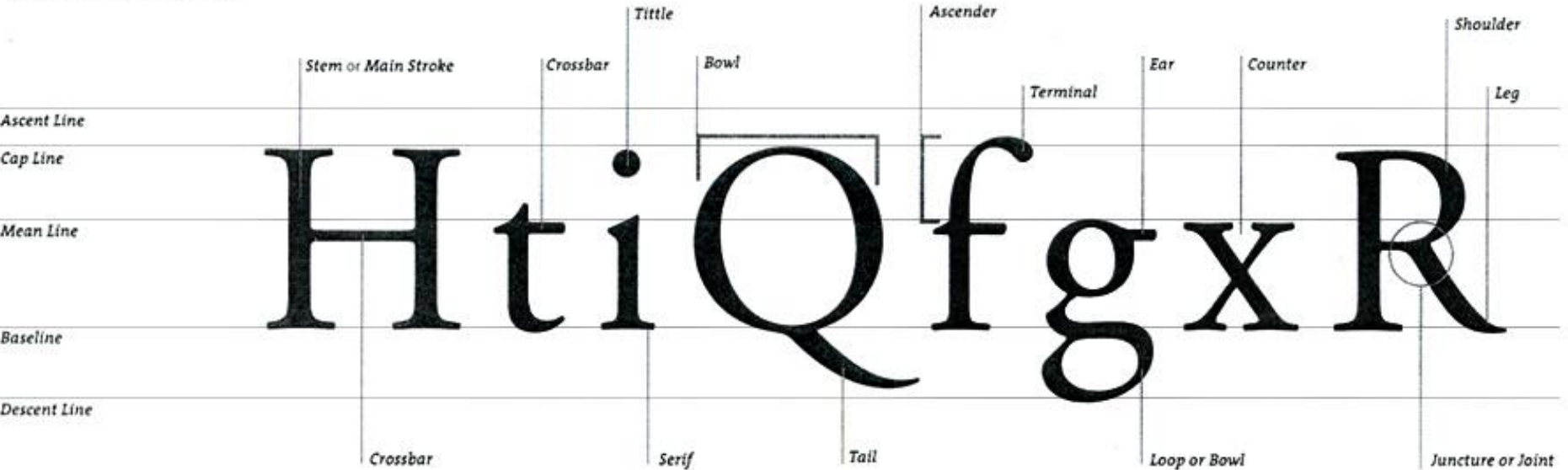
Type Modifications

Fonts|categories of fonts, font styles, font families, creating special characters

Label Size | character size & spacing (kerning), line spacing (leading)

Type Effects | callouts, shadows & halos

Size

1 in = 25.4mm = # 72-pt font

4 points

12 points

40 points

72 points

Size | 30 pt

Tw Cen MT

Veranda

Times New Roman

Lucida Console

Bernard MT Condensed

Size | Viewing distance

Viewing distance, NOT paper size matters

- A small map in a report should have the same font sizes as a large map in a report b/c both will be read from the same distance

Leading & Kerning

- Leading. Distance between the baselines of successive lines of type

- K e r n i n g. Adjusting the space between two letters
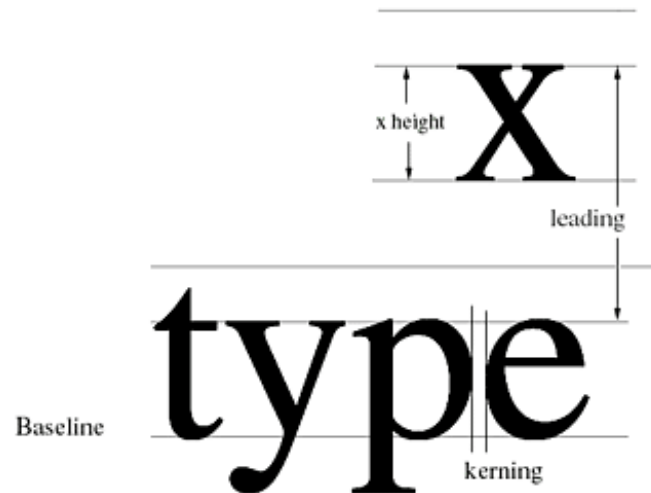
Ambiguity & Contradictions

- Character spacing has a weak effect on hierarchy because:
  - It can imply the extent of a feature – a larger feature has greater spacing
  - It depends on the shape of the area and length of feature name

Italics

- Originally developed to create a slightly smaller sized letter (more compact) w/o changing fonts
- Reserved for certain features such as streams and oceans
- Can help differentiate a title from a subtitle
- Can deemphasize margin text
- Can provide *emphasis* on one word

Bold | CAPS | SMALL CAPS

- Commonly used for titles and certain map labels such as city names or other major geographic features
- Can further emphasize the most important features
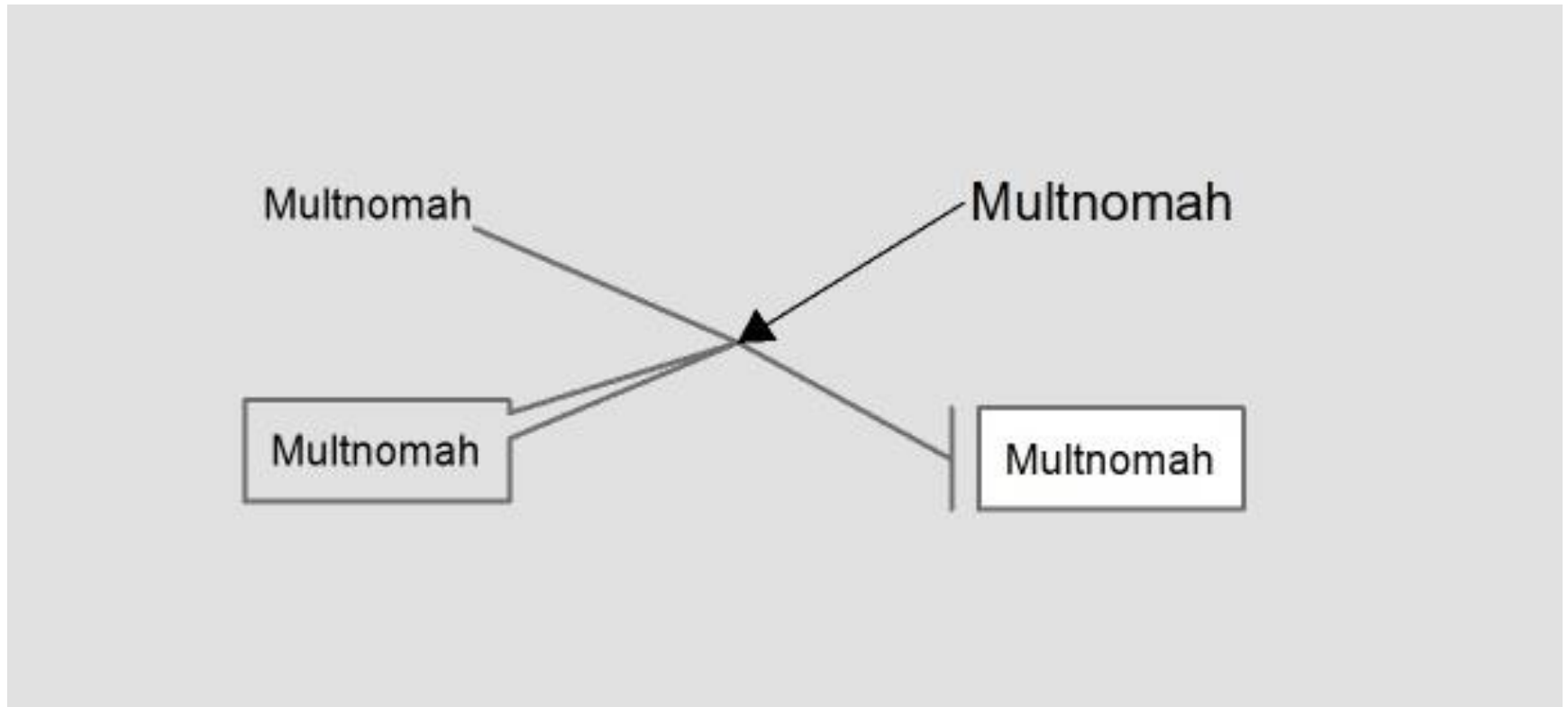- Does *not* increase legibility for small font sizes

Underline

- Much less common in mapping
- Sometimes used for the title, or title/subtitle pair

Type Effects

Callouts

Shadows

Halos

Cartographic Standards

Labels

Visual hierarchy

Visual hierarchy is applied to labels / features on the map

- Hierarchy follows your map purpose (not features size)

Visual hierarchy

Pittsburgh   **Bellefonte**   Philipsburg

State College   Pleasant Gap   Port Matilda

Boalsburg

Patton   PENN STATE

Center   Walker Building

Visual hierarchy

- Uppercase is often used for area features regardless of its importance

- Character kerning & leading pulls a label apart making it less prominent in the hierarchy

Fonts | Label Standards

Choose TWO font families for your map:

- ☐ Serif for physical features
- ☐ Sans Serif for cultural features

Fonts | Label Standards

Fonts | Label Standards

- Not always going to be able to place the label horizontally
  - i.e. Labeling a river that flows upward in your map
- Try to align text that falls on the outskirts of the map element so that it faces inward toward the center of the map

Font | Label Standards

- Hydrographic features labels (rivers, streams, oceans, lakes):
  - script or regular, italicized font
  - Initial caps are used except (sometimes) for ocean names which are all caps
  - Often shown in the same or darker blue hur as the feature itself
  - Polygon water feature (lake) a white font hue is sometimes used – only if is pronounced enough from the surrounding blue

Font | Label Standards

- The use of 'Red'
  - Feature labels that are relatively bad, poor or very important compared to other feature labels

- The use of 'Green'
  - Feature labels that connote a feeling of goodness, natural or not important

- Browns & Greens
  - Used to label national parks, forestlands, mountain ranges, elevation labels, etc.

Font | Label Standards

- Mountain Ranges
  - Non-italic and non-script font types
  - Uppercase
  - Utilize spacing rules so that the label runs along the entirety of the range
- Town & City names
  - Uppercase or initial capitals
  - Uppercase reserved for the most important cities, those with the largest pop, or both
  - Non-italic

Font | Label Standards

- Spacing between a label and its symbol should be about half the size of the lettering
- If labeling a large area – limit your character spacing to no more than four times the letter height
  - More than that and they will look unrelated to one another
- Serif fonts are easier to read on text with expanded space
  - Serifs tend to draw the eye toward the next letter

Font Resources

Where can I find fonts?

- Font Squirrel. http://www.fontsquirrel.com/
- 1001 Free Fonts. http://www.1001freefonts.com/
- Dafont. http://www.dafont.com/
- Urban Fonts. http://www.urbanfonts.com/free-fonts.htm
- Font Shop. https://www.fontshop.com/