

**Year 3** 28.04.2023

# Design Masterclass Typography

As you are nearing the end of your Final Major Projects, you are busy designing multiple outputs across a variety of formats, alongside creating your process documents to record and analyse this experience.



As part of all of this work, you can look at the typographic details of your projects to really polish and finalise everything you design to a professional standard.

Skills that will be incredibly useful to know when you graduate.



aaaaaa aaaaaa AAAAAAA AAAAAAA aaaaaaaa aaaaaaa AAAAAAAA AAAAAAAAA aaaaa "Typefaces are to the written word what different dialects are to different languages."



# Think about *how* you use typography to convey a message.





Typographic logo designed by Alan Fletcher of Pentagram in 1989..





Lindon Leader designed the legendary FedEx logo with the secret arrow, while working in the San Francisco office of Landor Associates in 1994.



MadeThought captures the essence of Cutting Room editing suite by contrasting two very different typefaces next to each other. Designed specifically to make use of the bag's corners.



Designed by award-winning company North. Ilumination is a central feature of the new identity, explored through the changing font weight in the new logo. Bringing visual cohesion to the Science Museum Group whose five museums share an astonishingly diverse collection spanning science, technology, engineering, mathematics and medicine.

# Now, let's look at the details...



In todays session, we are going to cover a checklist of typographic details. You will each receive this list so you can cross check it against your projects, to make sure you have considered all the following points.

- Kerning & tracking
- Line Length
- Typesize
- Hyphens, en and em dash
- Apostrophe
- Widows & orphans

- Use of colour in typography
- Typographic terminology
- Setting copy, lorem ipsum
- Animating type
- Useful links
- Useful books



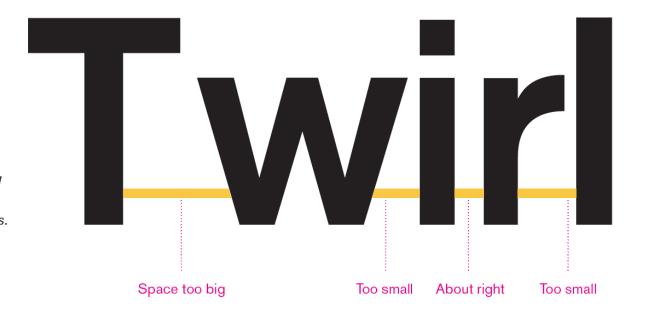
### Kerning & tracking

Kerning is the adjustment of the space between individual characters.

Good typographers adjust kerning by eye for visually balanced spacing. There are different approaches to kerning the space between characters depending on the style or type of design you are working on. Whether your spacing is very tight, very wide or somewhere in the middle, making sure they are visually balanced is the key. Good kerning takes practice, but once you can spot bad letter spacing, you can't help but notice it.



As you can see from the example on the right, the spaces range from being too big (or 'loose') to too small (or 'tight'). We need to visually balance these spaces by hand kerning each combination of neighbouring characters.



Here is the same word, but after some much needed kerning. The tightened gap between the T & w is the most noticable difference. The spaces are now visually consistent with each other and appear much more balanced.



Typeface = Akzidenz Grotesk Medium

There are different schools of thought as to how to treat kerning of an uppercase T.

Some believe that the following character should tuck right up underneath it, others think a slight overlap will do. It really depends on your personal preference and the overall balance of the word.

### Tracking

Tracking is the adjustment of the overall spacing between characters and is useful for larger amounts of text (often referred to as body text or body copy).

Tracking differs from kerning only in so much as it is a uniform adjustment of character spacing, rather than an adjustment of individual characters.



### Too much: +100 tracking

2001: A Space Odyssey is a 1968 science fiction film produced and directed by Stanley Kubrick. The screenplay was co-written by Kubrick and Arthur C. Clarke, and was partially inspired by Clarke's short story The Sentinel. Clarke concurrently wrote the novel of the same name which was published soon after the film was released. The story deals with a series of encounters between humans and mysterious black monoliths that are apparently

### Too little: -60 tracking

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### Just right: 0 tracking

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In theory, a well designed typeface shouldn't need to be 'tracked' as it should already be well-spaced when designed – but this isn't always the case in the real world. Tracking has a direct impact on legibility (or the readability) of text.

### Line length

7-12 words depending on the typeface you use.

Although personal opinions may differ and recommendations will depend on the actual size of the font (and specifically the width of the characters, including spaces), anything from 45 to 75 characters or 7-12 words is widely regarded as a satisfactory length of line for a single-column page set in a serifed typeface.



The window slid up easily-too easily-and Mike waited a long time, listening, before he made a move. The whole huge pile of the factory was still.

The window slid up easily—too easily—and Mike waited a long time, listening, before he made a move. The whole huge pile of the factory was still. There were no lights anywhere, except that dim one by the gate through the stockade. Lying quite still in the

The window slid up easily—too easily—and Mike waited a long time, listening, before he made a move. The whole huge pile of the factory was still. There were no lights anywhere, except that dim one by the gate through the stockade. Lying quite still in the darkness, Mike waited. There was no sound, no ringing of alarm bells, no bustle of activity anywhere. The manufacturing plant of the

The window slid up easily—too easily—and Mike waited a long time, listening, before he made a move. The whole huge pile of the factory was still. There were no lights anywhere, except that dim one by the gate through the stockade. Lying quite still in the darkness, Mike waited. There was no sound, no ringing of alarm bells, no bustle of activity anywhere. The manufacturing plant of the Whitney Jewelry & Watch Company remained as it had been before, a vast, still pile of brick, with empty-eyed windows staring blankly

Top examples too short, bottom example too long, The text in blue shows an ideal line length for a single column of text.

### Line length

Line length, can be overlooked when setting type – especially on screens, since text on the web is inherently more flexible. When responsive web design arrived on the scene in 2011, early adopters (who had mainly been using fixed widths for their content blocks like they used in print) were suddenly able to refactor their designs to great effect, but this introduced a new problem; unwieldy line lengths.



### Line length

Trent Walton devised a simple technique for keeping your eye on an optimum measure, especially handy if we find it hard to judge what 'feels' right: Simply place an asterisk at character 45 and character 75, and add in a new media query every time the two asterisks appear together on the first line.



The window slid up easily—too easily—and Mike \* waited a long time, listening \* before he made a move. The whole huge pile of the factory was still.

The window slid up easily—too easily—and Mike \* waited a long time, listening \* before he made a move. The whole huge pile of the factory was still.

The window slid up easily—too easily—and Mike \* waited a long time, listening \* before he made a move. The whole huge pile of the factory was still.

## "Words have meaning, type has spirit."



### Type size

HaHa Because the point size of a font doesn't tell you everything about how big a particular typeface will actually look, select type size optically.

That is, let your eye guide you, not the numerical value of the font. Repeat the optical decision-making process every time you change typefaces, whether it's for sub-heads, captions, lengthy quoted passages or another reason. This is especially important in text sizes, where readability is strongly determined by point size.



### Type size

On the web, the height of a particular point size isn't fixed as it is in print, but is dependent on the resolution of your monitor as well as the settings of your browser. Even so, the same relative differences exist from font to font. When doing print work, always look at a printed sample before determining your final typeface sizes. Why? The low resolution of your computer monitor doesn't display type accurately enough for this important decision!

The x-height of a font affects its readability, and will make different typefaces look larger or smaller at the same point size.

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Look carefully when you are designing an app - make sure the copy is large enough to be legible.



### Leading or line spacing

Leading or line spacing, is the amount of space between the baselines of each line of text. Correct leading is important because it gives multiple lines of text optimum legibility.

Line height, or line spacing, is commonly measured as a percentage of font size. Conventional wisdom is that line spacing of 130%-150% is ideal for readability, but even up to 200% is acceptable.







Hyphens & Dashes There are 3 types of lines; the hyphen (-), the En dash (-) and the Em dash (-).

The hyphen is used to join 2 words together, an en dash is often used to connect numerical values and an em dash is used within a sentence to stand in for a comma, a break in thought. In the UK we use an en dash rather than a hyphen.

On a mac, en dash is Option + Hyphen Em dash is Option + Shift + Hyphen



### A hyphen (-)

a book-loving student.

### En dash (-)

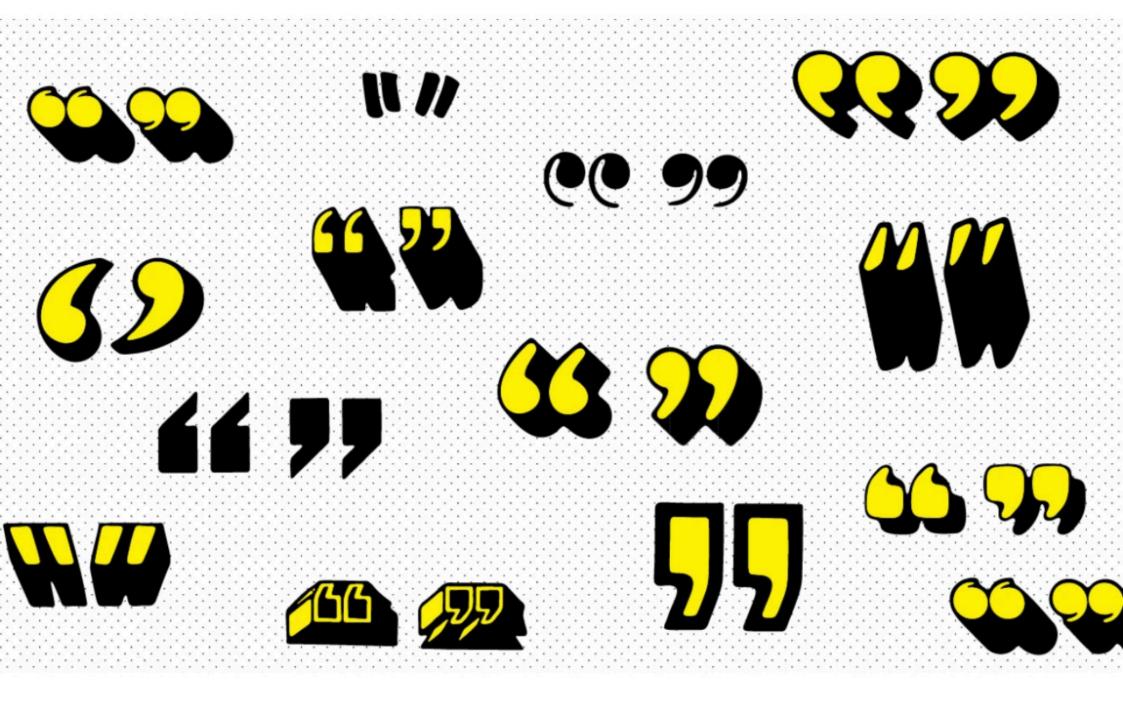
Elvis Presley-style dance moves.

### Em dash (—)

I opened the door, and there she stood—my long lost sister.

"Wait! I forgot to tell you-"





Smart quotes typically look curly, like a tiny 66. They will hug your text. Make sure you use them. Sometimes you'll receive text with dumb quotes - make sure you replace them.

"You"re wrong."
"I'm right!"



"There are really two important things about typography: readability and beauty; both are equally important."

Paul Rand.



### Widows & orphans

A widow is a single line of text consisting of one or more words that appears at the top or bottom of a column.

An orphan is a single word (or syllable) that sits at the bottom of a paragraph of text.

Check any body copy you have and get rid of these by using a soft return.



Typography is performed by typesetters, compositors, typographers, graphic designers, art directors, manga artists, comic book artists, graffiti artists, clerical workers, and anyone else who arranges type for a product. Until the Digital Age, typography was a specialized occupation. Digitization opened up typography to new generations of visual designers and lay users, and David Jury, states that "typography is something everybody does." <— Orphan

Typography traces its origins to the first punches and dies used to make seals and currency in ancient times. Gutenberg developed specialized techniques for casting and combining cheap copies of letter punches in the vast quantities.

<- Widow

Computer technology revolutionized typography in the 20th century. Personal computers in the 1980s like the Macintosh allowed type designers to create types digitally using commercial graphic design software.

Digital technology also enabled designers to create more experimental typefaces, alongside the practical fonts of what is known as traditional typography.

The cost for developing typefaces was drastically lowered,

<- Widow

### Checklist the following;

Avoid: Single or short words at the end of a line.

Avoid: Hyphens on a linebreak.

Avoid: Bad ragging.

Make sure: Sub-headings need to connect with copy

Make sure: Double spaces - copy is often supplied with double spaces,

make sure you remove them.

### Hanging quotes

Hanging punctuation is a technique of typesetting punctuation marks and bullet points, most commonly quotation marks and hyphens, further towards the edge so that they do not disrupt the 'flow' of a body of text or 'break' the margin of alignment.

It is so called because the punctuation appears to hang in the margin of the text and is not incorporated into the block or column of text. It is commonly used when text is fully justified.

"You cannot not communicate."



### "You cannot not communicate."



### Typographic legibility

As a general rule, try to make sure type is dark on a light coloured background. Using shades such as yellow for text on white is really difficult to read. Also make sure type doesn't overlap an image to help legibility.

The legibility of a typeface is a product of its design and relates to the ability to distinguish one glyph from another when reading. Factors contributing to a typeface's legibility include the following.



A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

heart beating, and he wondered

what was coming.

A grasshopper began to chirrup in the grass, and a long thin dragonfly floated by on its brown gauze wings. Lord Henry felt as if he could hear Basil Hallward's heart beating, and he wondered what was coming.

X-height: This term refers to the height of the lowercase x from its baseline. The taller the x-height, the more legible the typeface tends to be.

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Character width: The easiest type designs to read are those that have an 'average' overall width. Very condensed as well as extended designs are less legible, especially for smaller settings such as text, subheads, and credits.

Weight: Extremely light or heavy weights are more difficult to read, so if legibility is your goal, stick to something in the middle. Book weights are so named because their legibility means they are most often used to typeset books for that very reason.



### Typographic readability

Readability is related to how the type is arranged (or typeset) and therefore is controlled by the designer.

Tight line spacing impacts readability negatively, so make sure there is enough line spacing to maximise readability, which in general is at least two to three points for print, and a bit more for smaller digital devices.



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Type size: When setting text, the smaller the size, the more challenging it can be to read. Especially true for seniors, children & those with visual impairments. So, consider the demographics of your intended audience when deciding on a size for text.

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Type case: All cap settings for lengthy text are more challenging to read due to the lack of ascenders and descenders. These contribute to character recognition, so if readbility is important stick to upper and lowercase.

Line spacing: The amount of line spacing needed to improve readability will depend on the size & design of a typeface, as well as its x-height. Tight line spacing impacts readability negatively.



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Colour, or contrast: Make sure there is enough colour contrast between the type and background. This is important when you are using black and white (and tints of the former) as well as colour.

When styling type for digital usage, be sure to allow for variation from one device, platform and settings to another, as they can vary dramatically in how they display colour and contrast. Remember, since these readability factors are chosen by the designer and are not inherent to the text, even very legible fonts may lack readability when set in certain ways. In addition, not all factors affecting readability are equally significant. For example, although generally speaking, smaller type size is harder to read, you may be able to improve a font's readability by setting it slightly smaller, but with wider line spacing.



"Typefaces are not only there to be read, you also see them."



#### Lorem ipsum

Lorem ipsum is dummy text used by the printing and typesetting industry.

Lorem ipsum has been the industry's standard since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged.





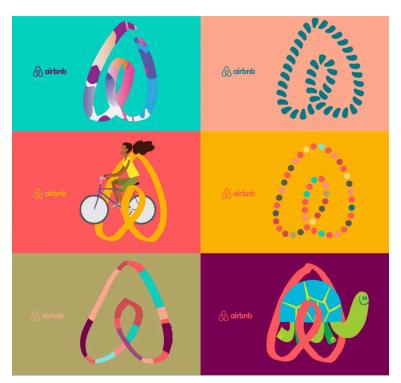


You can use Lorem ipsum as holding copy when you design to play with layout and format or to brief a copy writing on how may words you need.



### Animating type

If you have the skills to animate your type or brand identity, it's definitely worth considering. If you don't, when you have time explore using something like Adobe Procreate.









"Design is not a thing you do, it is a way of life."





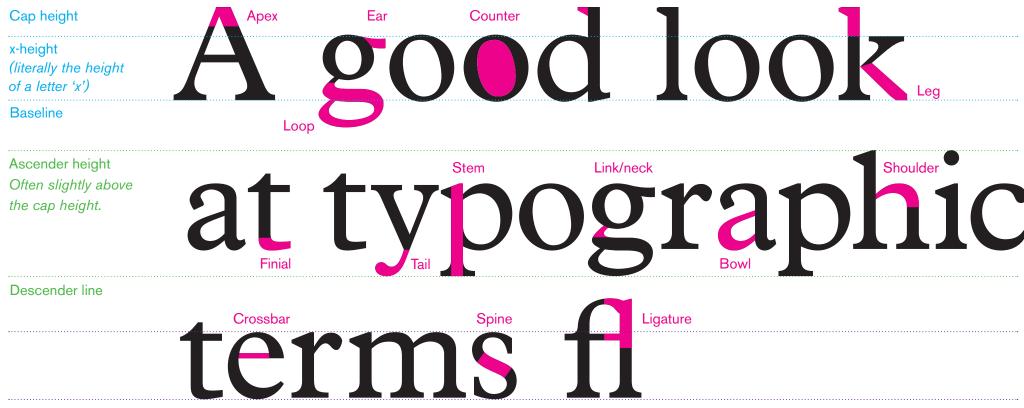
#### The anatomy of type

The anatomy of type describes the visual elements that make up the letterforms within a typeface. Each letterform is made up of individual components (for example: spine, stem, stroke).

Remember that sizes and relationships between elements will vary depending on the typeface, but the general terminology is always the same. Type designers create typefaces using these components to contribute to the overall appearance and legibility of a typeface.



#### The anatomy of type



Overhang

Curved characters such as o, e & s often hang slightly over the cap height, x-height or baseline.

#### TYPOGRAPHY TERMS





ANTI-ALIASING Semi-transparent pixels along the edges of letterform outlines to smooth jagged edges











Point at the top of a letterform where two strokes meet



Curved part of a

letterform leading

into a straight stem

A stroke that doesn't connect to another stroke or stem on one or both ends



ASCENDER

the x-height

ASCENDER LINE Invisible line marking On lowercase letters the vertical stroke the height of all that extends above ascenders in a font



AXIS / STRESS Invisible line dissecting the glyph from top to bottom at its thinnest point



BALL TERMINAL Terminal with a circular shape



BASELINE BEAK Invisible line on Decorative stroke which the letters at the end of the arm in a font rest of a letter, similar to a serif but more



BILATERAL SERIE Serif extending to both sides of a main stroke

FINIAL

Tapered or curved

end on letters like

the bottom of a 'c'

double storey 'a'

LEADING /

to haseline

LINESPACING

Vertical space

between lines of

text, from baseline

or 'e' or the top of a



BRACKET Fully closed rounded Curved or wedge-like part of a letter connection between the stem and serif of some fonts



CAP HEIGHT Height of a capital letter measured from the baseline



COUNTER An area partially or letterform or symbol like an 'o', 'p' or 'c'



CROSS STROKE The horizontal stroke entirely enclosed in a across a lowercase 't'



CROSSBAR Horizontal stroke Inside angle where like the middle of two strokes meet an 'H'. 'A' and 'e'



CURSIVE Handwriting with joined-up letters. Can be used to describe an italic to handwriting



Parts of lowercase letters that extend below the baseline



Invisible line marking

the lowest part of

the descenders

DISPLAY FONT Typefaces used for large type like banners and headlines



Small stroke extending from the bowl of a lowercase 'a' or 'r'



pronounced

Enclosed space in a lowercase 'e' similar to a counter



FLAG Horizontal stroke on the figure '5'



The part of a stem that rests on the

baseline



GAD700K An embellishment in a ligature that is not originally part of either letter



Type style designed

with narrow width

proportions

A single character (number letter mark or symbol) is represented by a alvph

German name for sans serif



HAIRI INF HAI BEETT The lightest font German name for family weight name; can refer to thinnest in a type family



HEAD SERIE Half serif at the top the semi-bold weight — starting point of the letterform



HINTING Data instructions within a font to help it render clearly at varying sizes



ноок Curved stroke in a lowercase 'f'



Areas of the counter are opened to allow for ink to spread, avoiding dark spots



Slanted to the right unlike roman typefaces which are upright



JOINT / JUNCTURE Where a stroke joins a stem



KERNING Adjustments to the space between pairs of letters, used to correct spacing problems in

combinations like 'VA'



Downward sloping stroke on a 'k' and 'R'

SHOULDER

and 'n'

Curved part in a

lowercase 'h', 'm'



LIGATURE Two or more letters ioined together to form one glyph



LINK / NECK The link connecting the top and bottom bowls of a lowercase



A rounded enclosed or partially-enclosed projecting stroke



MIDLINE Invisible line restina on the body of the lowercase letters



stroke of a letter

OBLIQUE / SLANTED Slanted typeface. mechanically sheared unlike italics which are drawn and crafted separately



HANGING FIGURES Numbers aligned with the lowercase, traditionally used for body text setting



A round or pointed letter extends higher or lower than a flat letter to make it optically appear the same size



A unit of measure corresponding to 12 points or pixels



POINT A unit of measure corresponding 1/12 of a pica or 1 pixel



POINT SIZE The size of the body of each character in a font



Support additional languages including Central European and Cyrillic and/or Greek



**RASTERIZATION** Converting an image from vector to raster (pixels or dots)



ROMAN Standard type style or regular weight of an upright typeface



letter

Small stroke at the beginning or end of main strokes of a



SINGLE-TIER When an 'a' or 'a' has one counter rather than two



SMALL CAPS Capitals which are a similar height to the lowercase, designed for abbreviation and emphasis in texts



Horizontal space on the side of each character



The main curve in 'S' and 's'



SDLID

off a main stroke

SPURI ESS Small protruding part Curves transition into straight stems without a spur



A vertical stroke in a character



SWASH Exaggerated decorative serif. terminal or tail



The descending stroke of the letter



TADED Thinner and refined end of a stroke



The end of any stroke that doesn't have a serif



The dot on the 'i' and the 'i'



TRACKING Spacing added to or removed from groups two strokes meet of letters outside the original spacing and kerning specified within a font file



The point where at the bottom of a character



WEIGHT The heaviness of a typeface. independent of its size; can refer to a style within a font family (Thin or Regular)



Height of the lowercase 'x' which is used as a guideline for the height of unextended lowercase letters

Useful links

Web typography

Webtypography.net

Type@cooper

Coopertype.org

Create your own typeface

Yourfonts.com

Fontstruct.com

Try out font combos

Fontjoy.com

Accessibility

https://colourcontrast.cc

https://www.w3.org/WAI/standards

-guidelines/wcag/

Indentifying fonts

Fontid.co

Typesample.com

Fontsinuse.com

Check type size

Sizecalc.com



"Be Consciously Brave. Design should not be created purely out of analysis and research. Truly remarkable design is influenced from the heart as well as the head. Take risks."

Ben Parker, MadeThought.



### Futher reading

Type Matters!; Jim Williams

Thinking with Type; Ellen Lupton

Five Simple Steps to Better Typography; Mark Boulton

Stop Stealing Sheep; Erik Spiekermann & E.M. Ginger

Grid Systems; Josef Muller-Brockmann

The Elements of Typographic Style; Robert Bringhurst

Notes on Book Design; Derek Birdsall

Herb Lubalin; Unit Editions

Basics Design: Typography; Gavin Ambrose & Paul Harris

An Essay on Typography; Eric Gill

Scripts; Steven Heller

Type & Typography; Phil Baines & Andrew Haslam

Logotype; Michael Evamy

Swiss Graphic Design; Richard Hollis



### Type foundaries/Libraries

A2\_Type

Commercial Type

Colophon

FontFont

The Foundry

Hoefler & Frere-Jones

House 33

Hype for Type

Klim Type Foundry

Lineto

Optimo

Process Type Foundry

Typekit

Links

Playtype.com

Grillitype.com

Monotype.com

Typography.com

Daltonmaag.com

Justanotherfoundry.com

Swisstypefaces.com

Typeverything.com

Signalfoundry.com

vllg.com



#### And finally...

Typographic Lord's Prayer

Our Father who art in leading, typeface be thy game. Your kerning come; Your work be done on screen, as it is in print. Give us this display our foundry set, and forgive us our Grotesk, as we have forgiven our ascenders. And lead us not into rasterisation, but deliver us from PostScript. For thine are the accents, the baseline and the glyph. Descender and italics. Amen.



Meet the cast:

# BCD **EFGHIJK** QRSTU

Now see the movie:

## Helvetica

A documentary film by Gary Hustwit

Helvetica is an American independent feature-length documentary film about typography and graphic design, centered on the Helvetica typeface.

Directed by Gary Hustwit, it was released in 2007 to coincide with the 50th anniversary of the typeface's introduction in 1957.

Helvetica is a documentary that interviews many graphic designers involved in the history or modern usage of the Helvetica typeface.

If you are interested, it's also worth watching;

Sign Painters: The Movie

Ted talks: Paula Scher & Matthew Carter

Use your individual typographic checklist and think about all we have discussed today.

Is there anything in your Final Major projects you can work on or improve?



We'll run typographic tutorials, looking at all the details of your projects for the rest of this session.



## Any questions?

