## CS160 USER INTERFACE DESIGN

FALL 2020

### **GRAPHIC DESIGN**

7 OCT 2020



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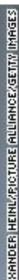




# **NOBEL PRIZE - GO BEARS!**



Jennifer A. Doudna & Emmanuelle Charpentier





### **Reinhard Genzel**

ANNOUNCEMENTS Plan for PROG 02 PROG 2-B (Due Friday 16 Oct) 9 DAYS!! PROG 2-B Status? Section this week: FEED 02 – Team Check-ins using Kaleidoscope Wed: Graphic Design, Typography, and Design Language **Next Week Mon**: Visual Information Design **Next Week Wed**: Team Checking Office Hours (not a regular class) DESIGN 05: Project Idea (due 19 Oct) Be bold and creative in your idea

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## CS160 User Interface Design Fall 2020



### GRAPHIC DESIGN

7 OCT 2020

Eríc Paulos









### Also

### many thanks to Shana Hu

Check out

DeCal Working with Typography







UPLINK ACTY AUTO	TEMP GIMBAL LOCK	4 March	COMP	PROG	VERB	+	7	8	9	CLR	
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### **GRAPHIC & PRODUCT DESIGN**



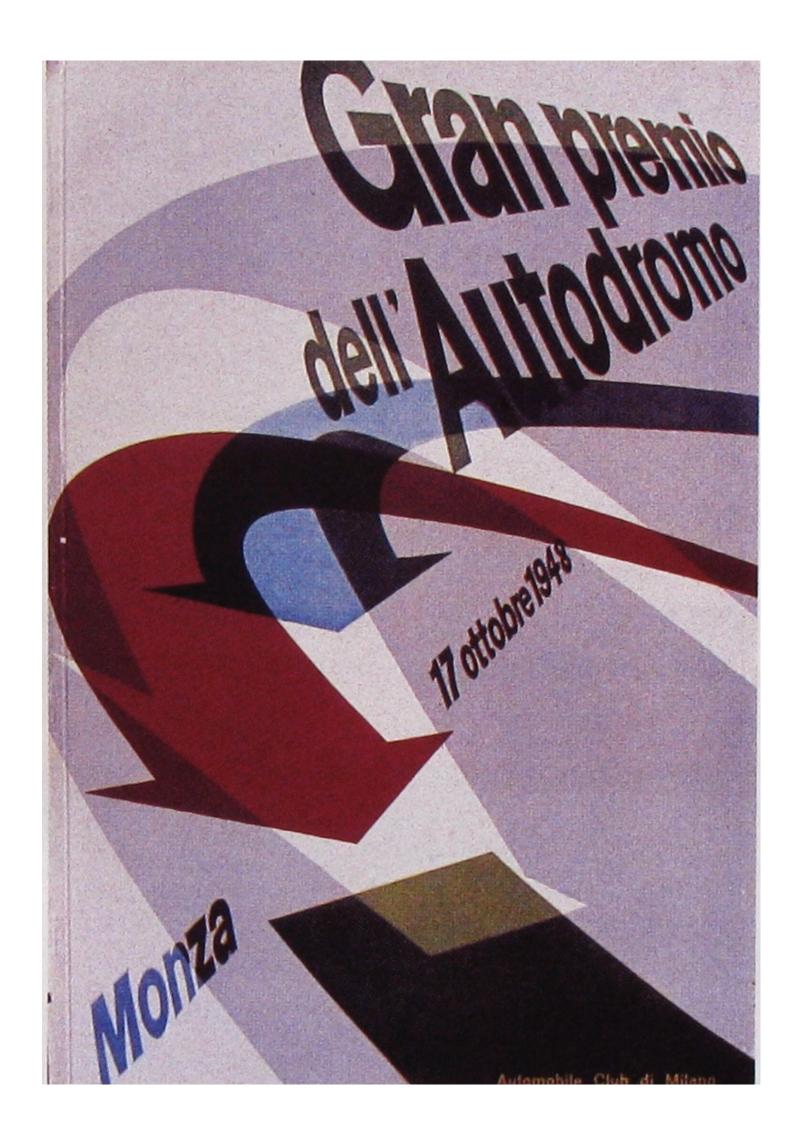
# TOPICS

Brief History of Graphic & Product Design Simplicity and Elegance Color **Gestalt Principles** Typography Composition

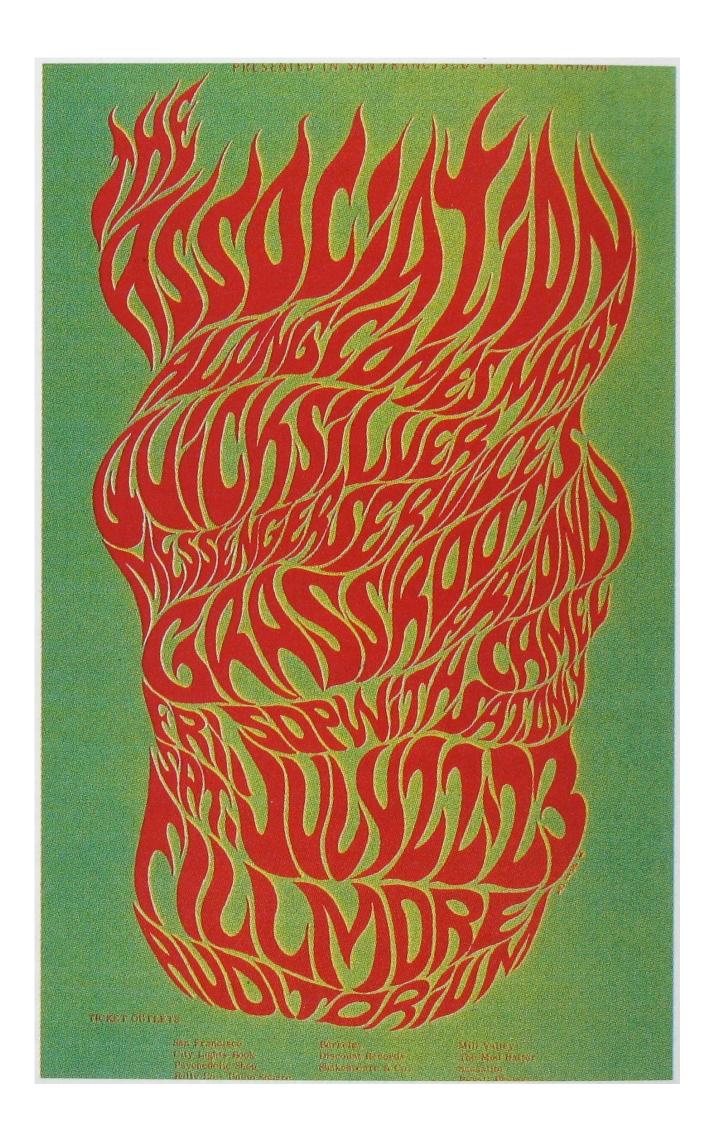
### **GRAPHIC DESIGN IS ABOUT COMMUNICATION**



## **GRAPHIC DESIGN IS ALSO ABOUT INTERPRETATION**



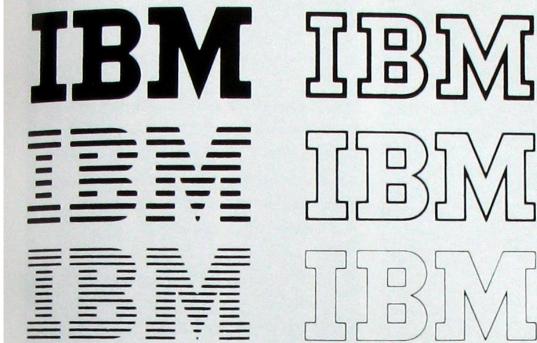
Max Huber, Poster, 1948



Wes Wilson, Poster, 1966



### **DESIGN SYSTEMS: CORPORATE IDENTITY**





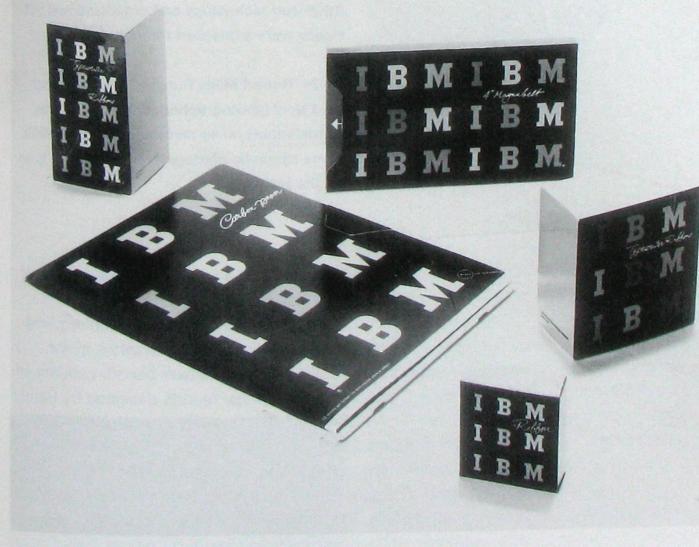
22-19

22-17. Paul Rand, IBM trademark, 1956. The original design is shown with outline versions and the eight- and thirteen-stripe versions currently used.

22-18. Paul Rand, IBM package designs, late 1950s. A strong corporate identification was produced by a repeating pattern of blue, green, and magenta capital letters on the black package fronts, white handwritten product names, and blue package tops and sides.

22-19. Paul Rand, IBM package design, 1975. After two decades the original packaging design program was replaced by an updated design using the eight-stripe logo.

22-17



22-18



### **DESIGN SYSTEMS: CONTENT-DRIVEN SITES**

US World Politics Business Opinion Health Entertainment Style Travel Sports Videos

HAPPENING NOW

### Trump stopped stimulus negotiations, only to appear to reverse course



Aides have no idea where the President sits on stimulus at this moment. But all agree talks are done for now.

Trump halted stimulus talks. Here's what it means for you

**Analysis:** It's an insane time for Trump to reject a stimulus package

• Harlow sounds off on politicians after Trump calls off talks

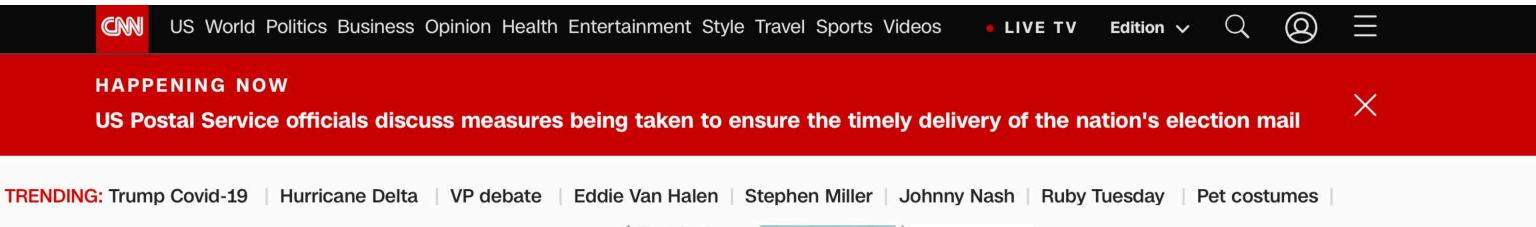
Billionaires have never been richer despite the pandemic

The pandemic could push 150 million more people worldwide into 'extreme poverty'

Goldman Sachs: A Democratic sweep would mean faster recovery



 Opinion: How Donald Trump could win — and have Kamala Harris as his VP How to watch tonight's debate • Pence and Harris prepare for a clash on coronavirus





### **Court rules Trump can't block** New York subpoena for his tax returns

• READ: 2nd US Circuit Court of Appeals ruling on Trump's tax returns

 New York AG seeks to depose Eric Trump in investigation of Trump's finances

### 5 things to look for in tonight's vice presidential debate

### 'It's like a parasite': How a dangerous virtual cult is going global

Analysis: Trump stuns with high-risk, erratic behavior

White House preparing for Trump to return to the Oval Office as early as today

LIVE UPDATES Trump feels 'great!' and is 'symptom-free,' his doctor says

Arizona Senate debate turns on Trump

Two ISIS fighters charged in deaths of journalists and aid workers in Syria

• This video shows vulnerable Senate Republicans' Trump problem

Hurricane Delta slams into Mexico before heading toward the US

Nick Cordero's wife goes after Trump

Analysis: Lindsey Graham may be in trouble

Olympic runner reacts to Trump tweet

A newlywed couple who had been married just four days was killed in plane crash

Jacob Blake is out of the hospital, but how long he'll be in rehab remains a question

Niller's wife who had virus mocks Kamala Harris over plexiglass shields at debate

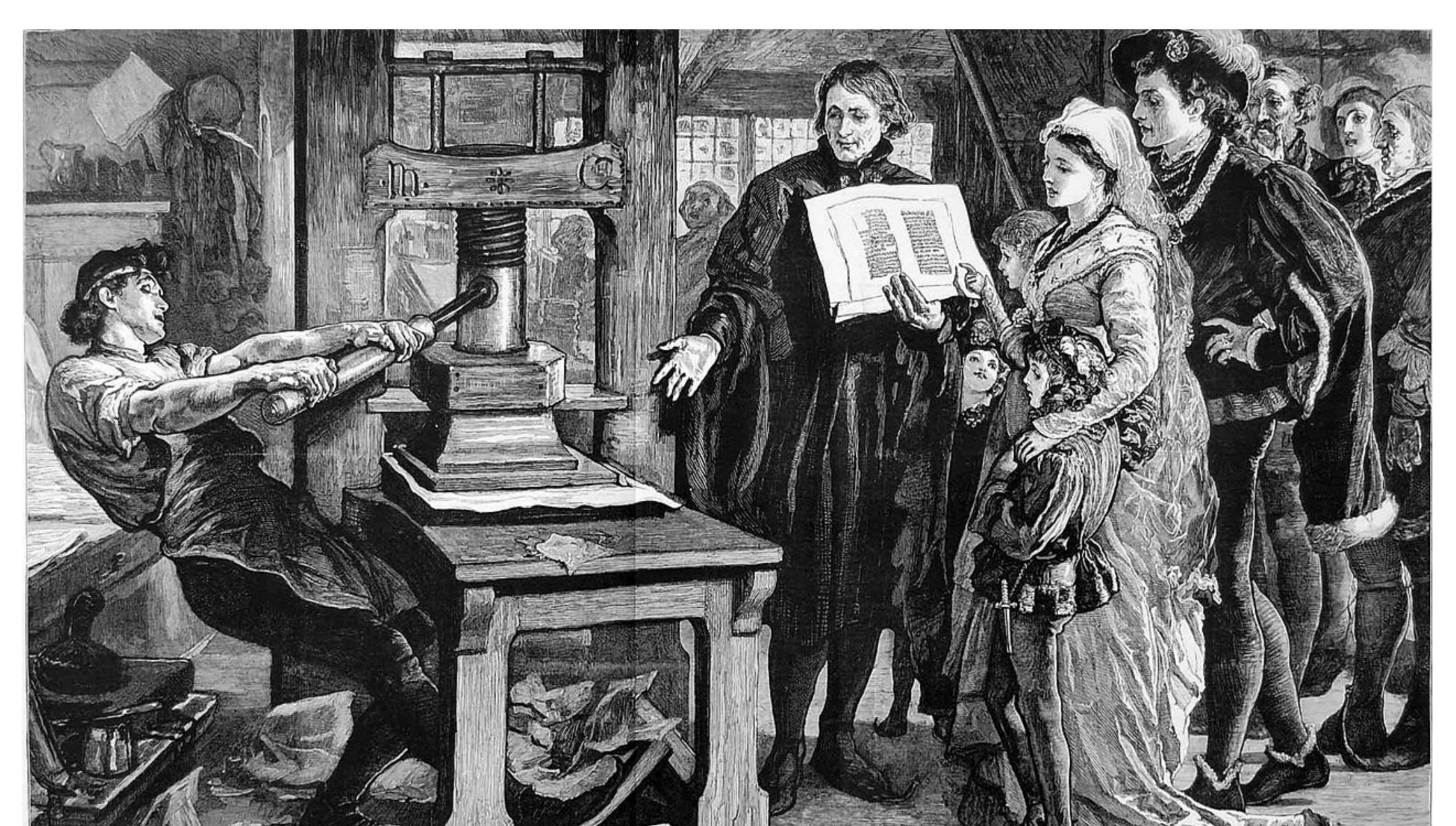
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HOLD FREE NO ATT	PROG RESTART TRACKER				NOUN	-	4	5	6	STBY
STBY	OPR ERR					0	Ι	2	3	KEY

### TYPOGRAPHY

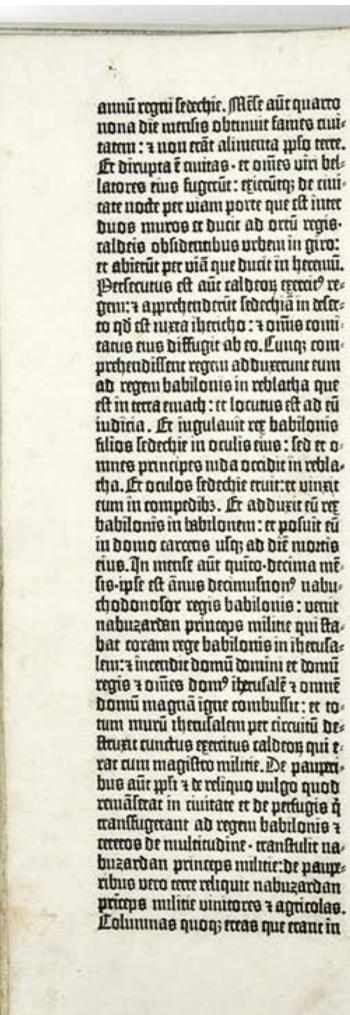
## TYPOGRAPHY

Typography exists to honor content. Read the text before designing it. Choose a typeface that matches the character of the text.

### LETTERPRESS



### **GUTENBERG BIBLE**



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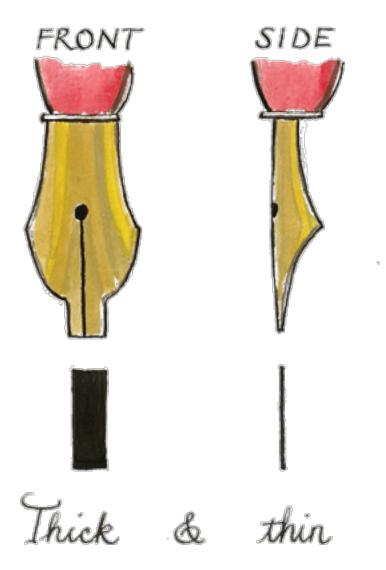
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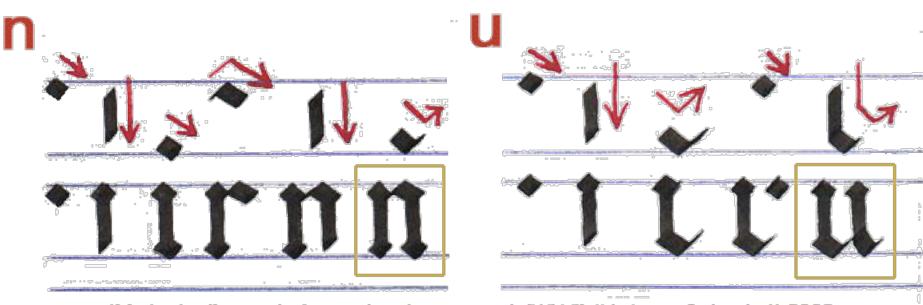
### 1450–1455



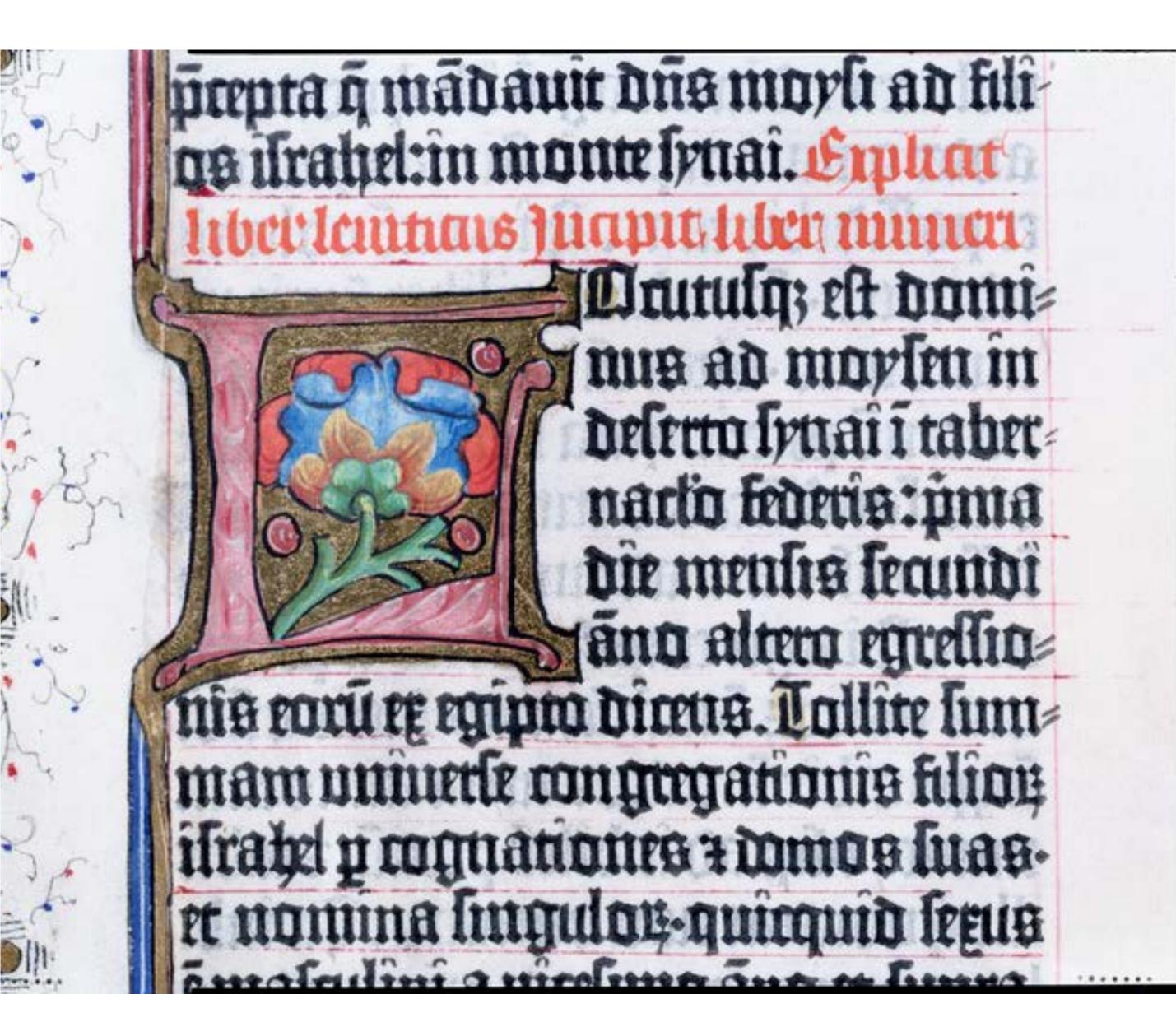
## GUTENBERG BIBLE

TYPICAL (WESTERN) CALLIGRAPHY NIB



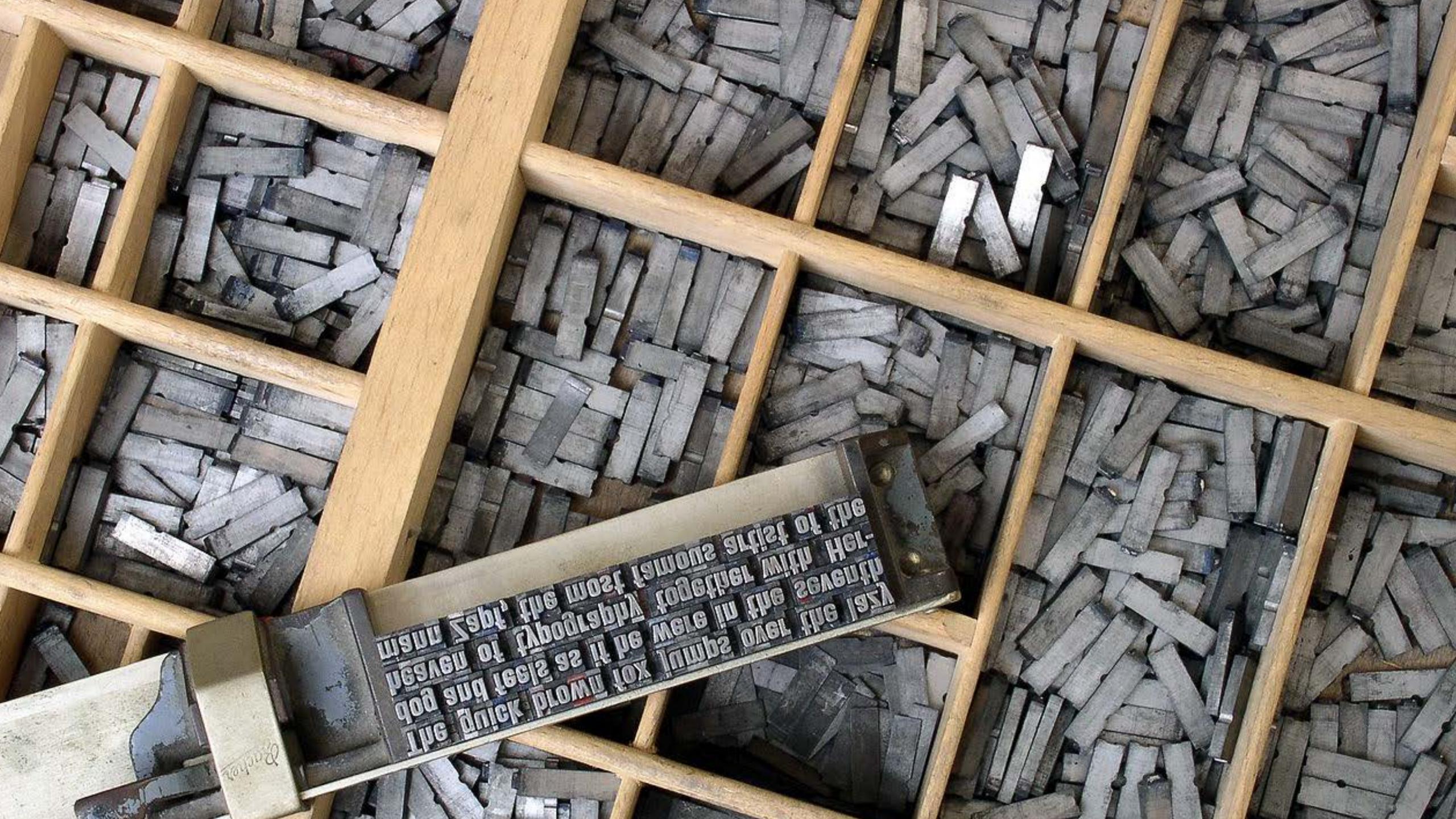


gothic textualis quadrata version 1 ..... copyright katharine-scarfe beckett:2009ne

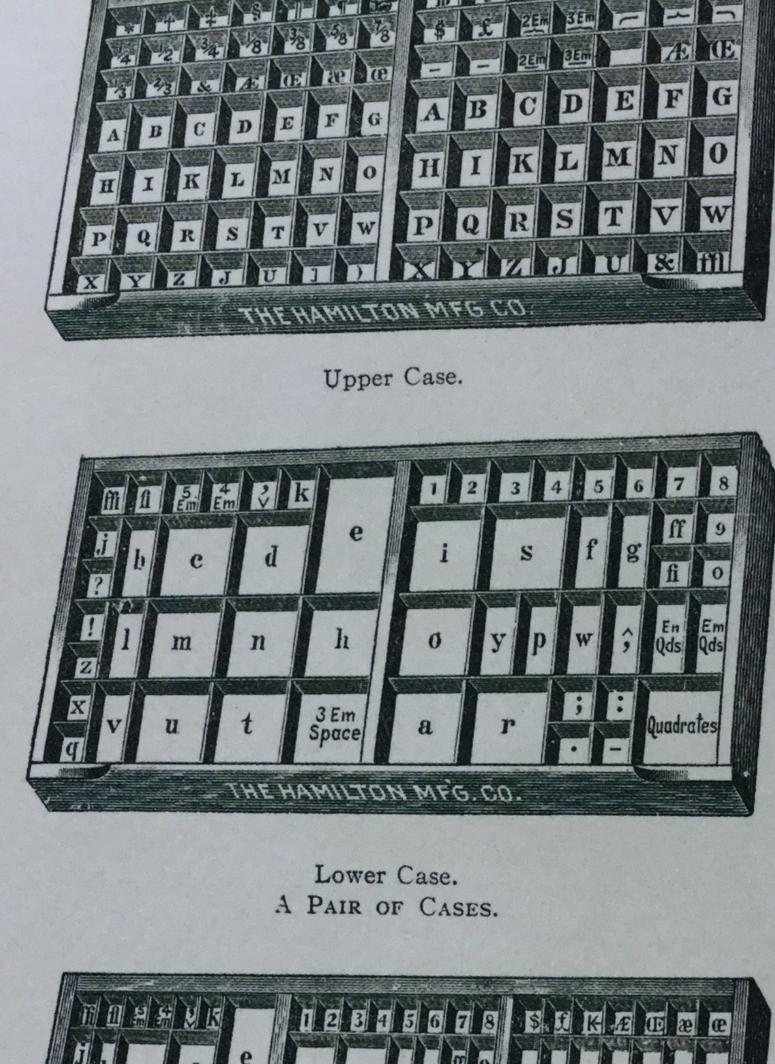


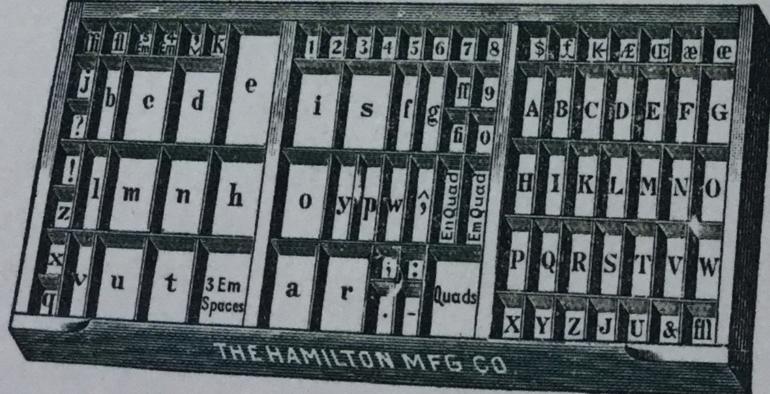






## LETTERPRESS







### upper case

lower case

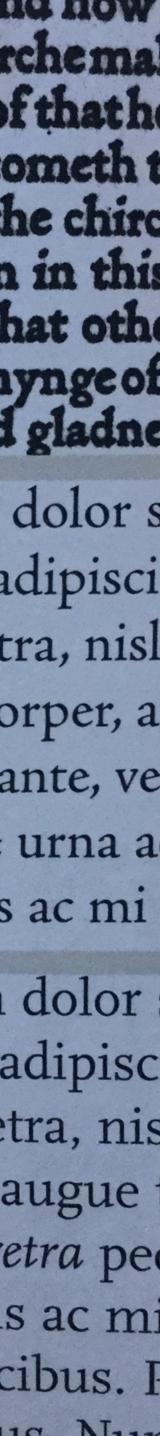
# TYPOGRAPHY

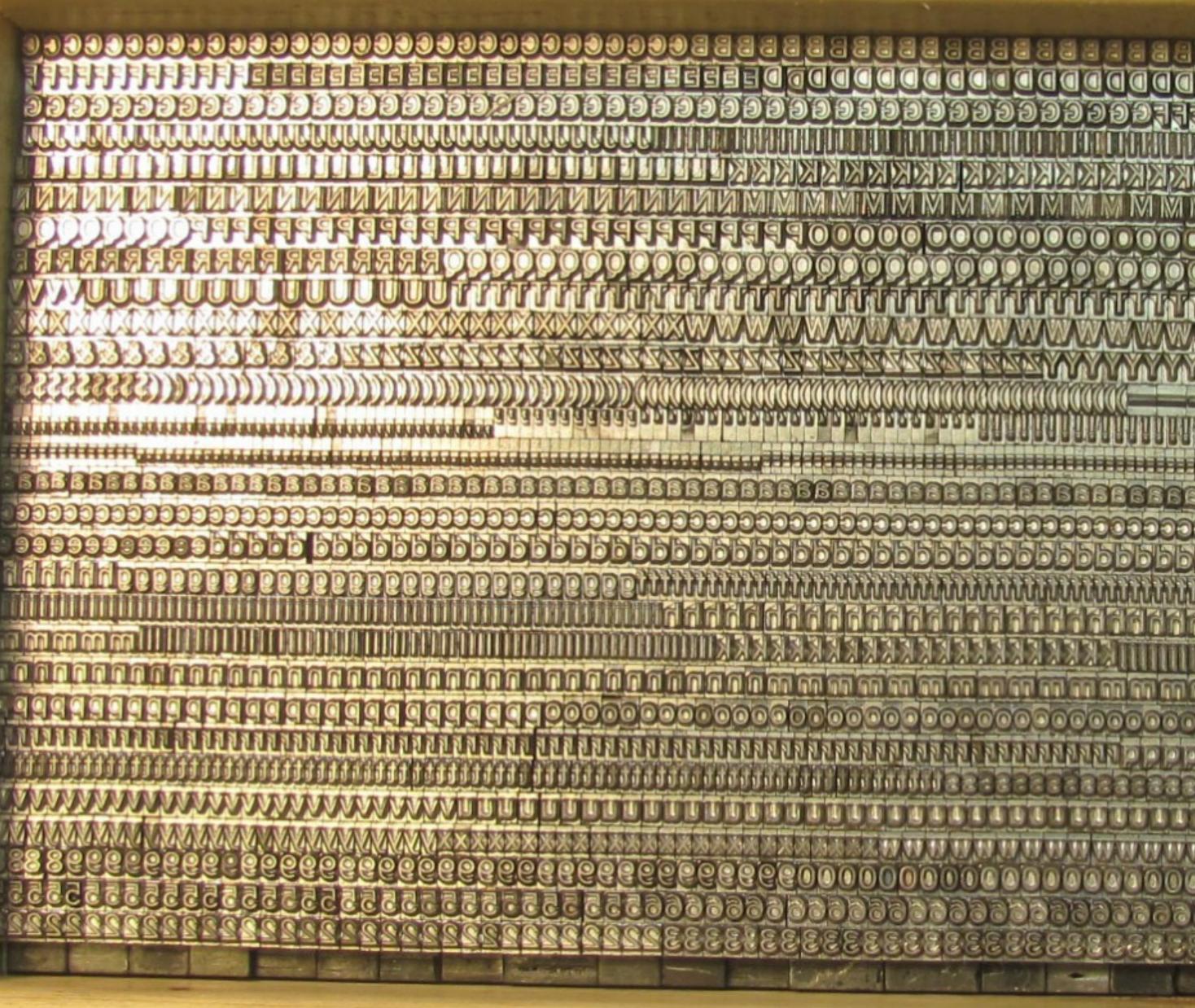
Nicolas Jenson	Golden Type
1465	1890
Centaur 1912	Adobe Jenson 1995
Ruit	Scala
1990s	1991

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### What fonts originally were like

NANAKKKKKKKKKKKKK 

### Fonts are now digital files that contain letterforms.



## TYPEFACE

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### Typefaces are the look of all characters in a font.

# HELVETICA LIGHT HELVETICA REGULAR HELVETICA BOLD

Helvetica is a typeface.It is a font-family which is made up of fonts.A font is a specific size and weight of a typeface (i.e. Helvetica Bold).

# **TYPEFACE VS FONT**

### Brief History of Graphic & Product Design













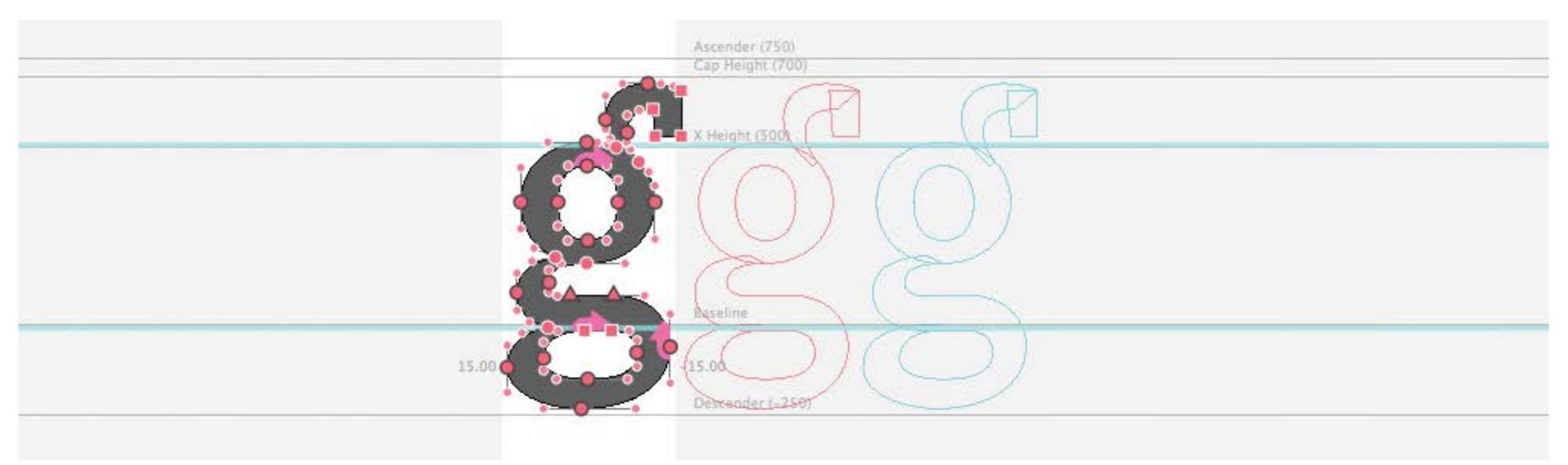
**typeface** is the design of the letterform font is the delivery mechanism





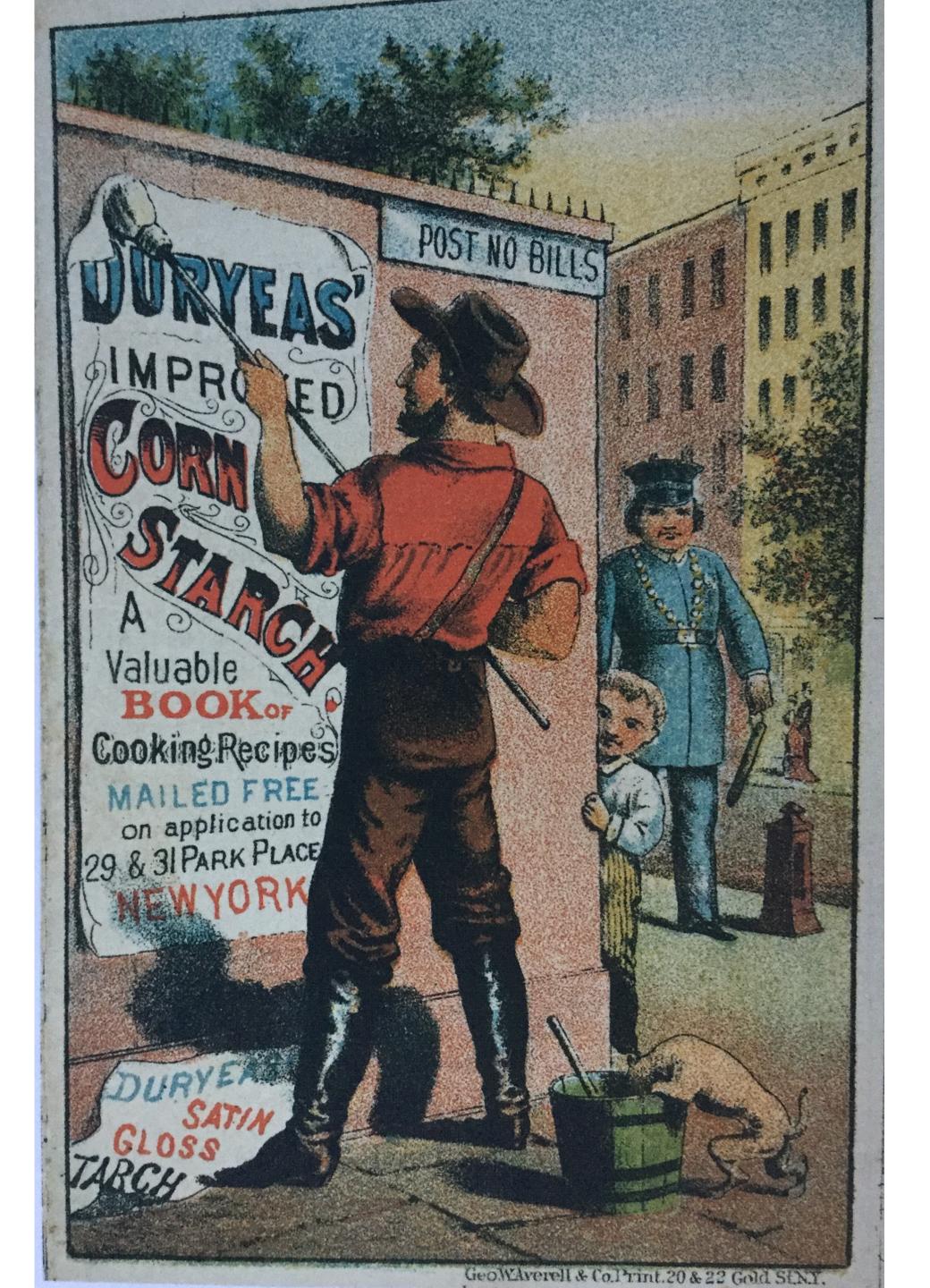
### you design a **typeface** you make a **font**

### A font is what you use a typeface is what you see



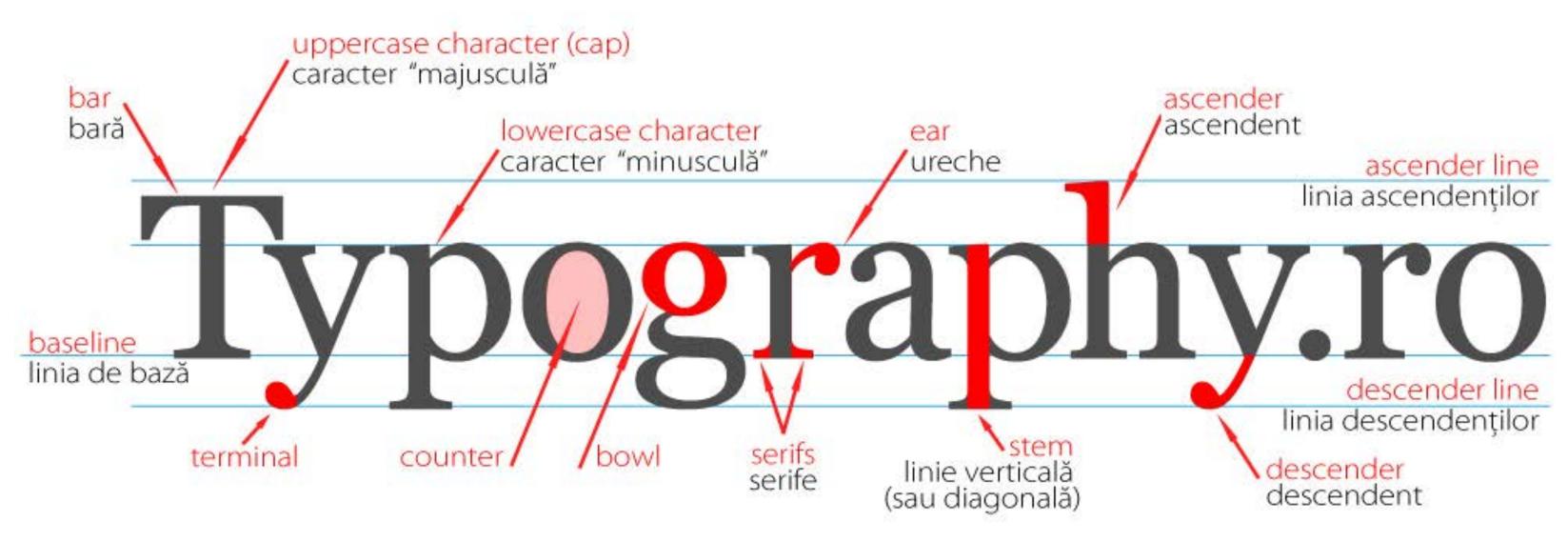
### RoboFont

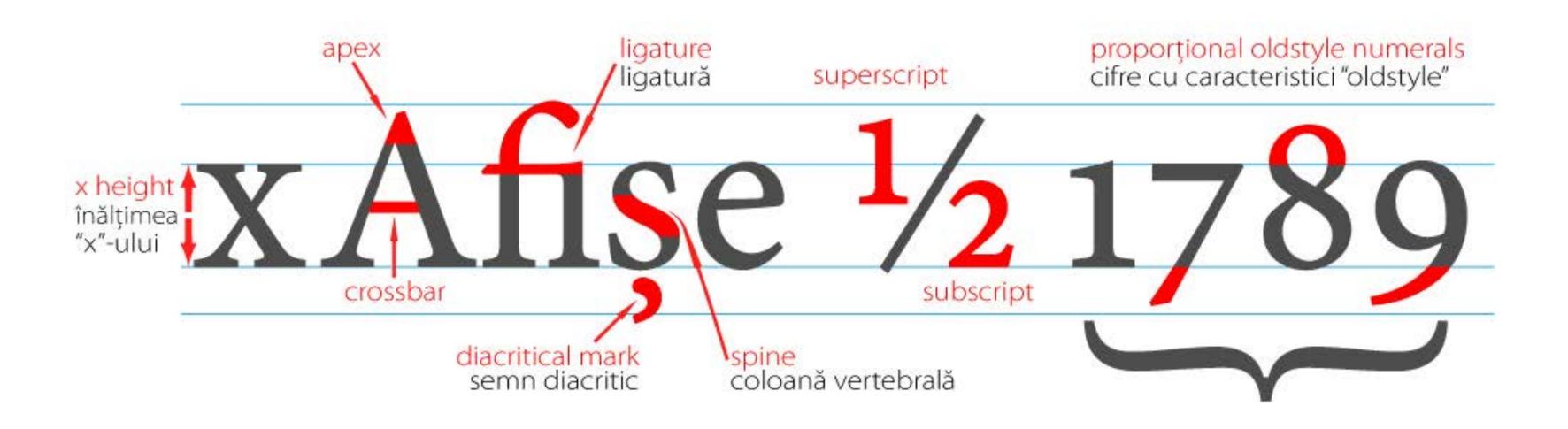




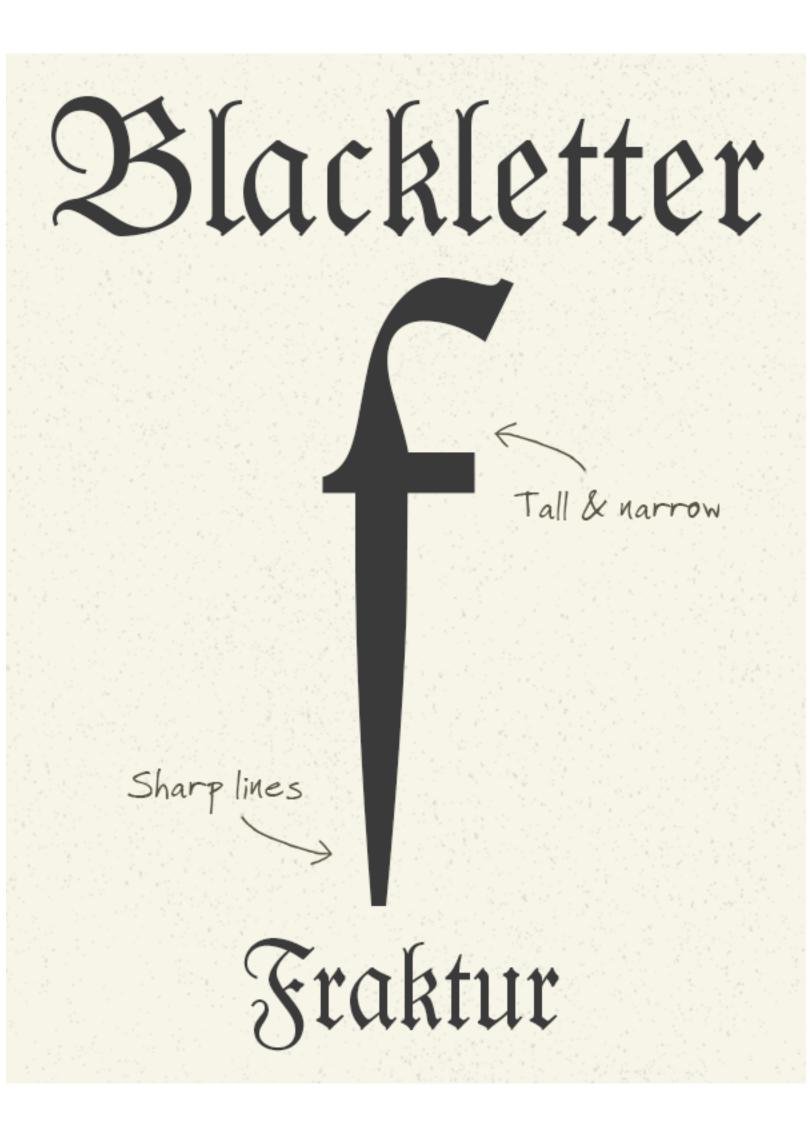


# **TYPEFACE ANATOMY**

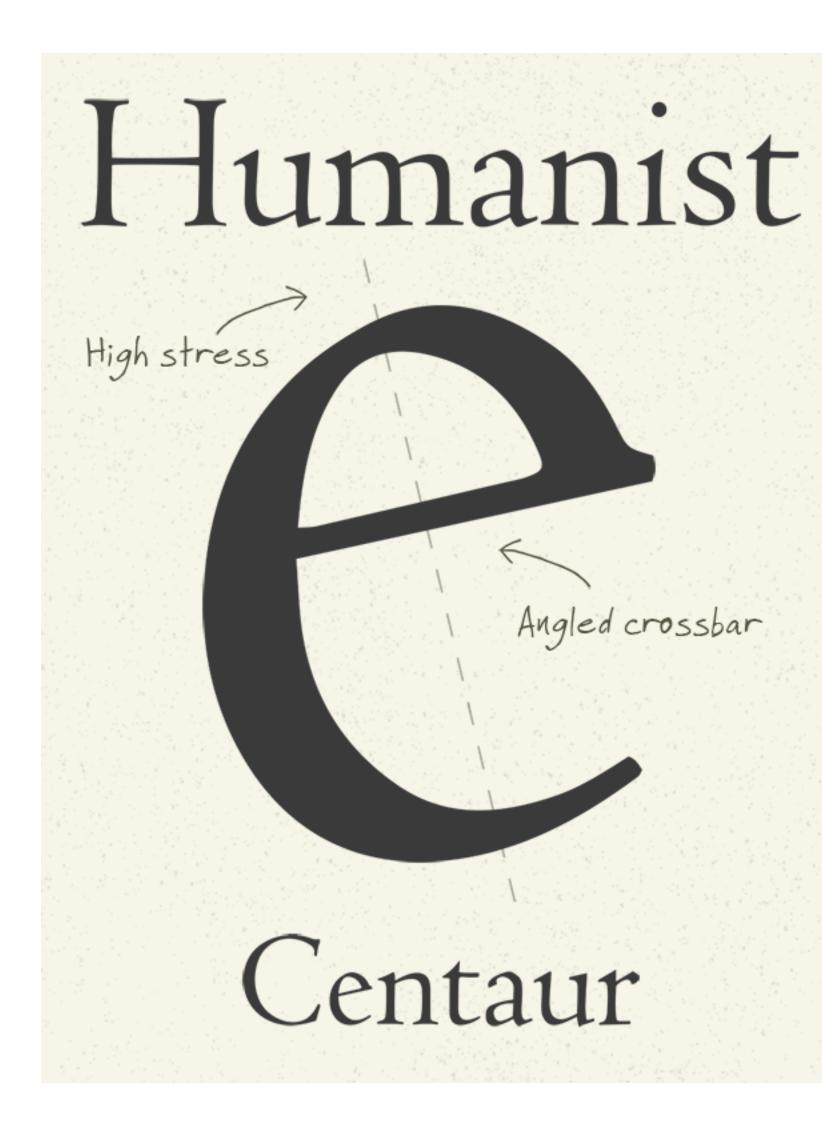




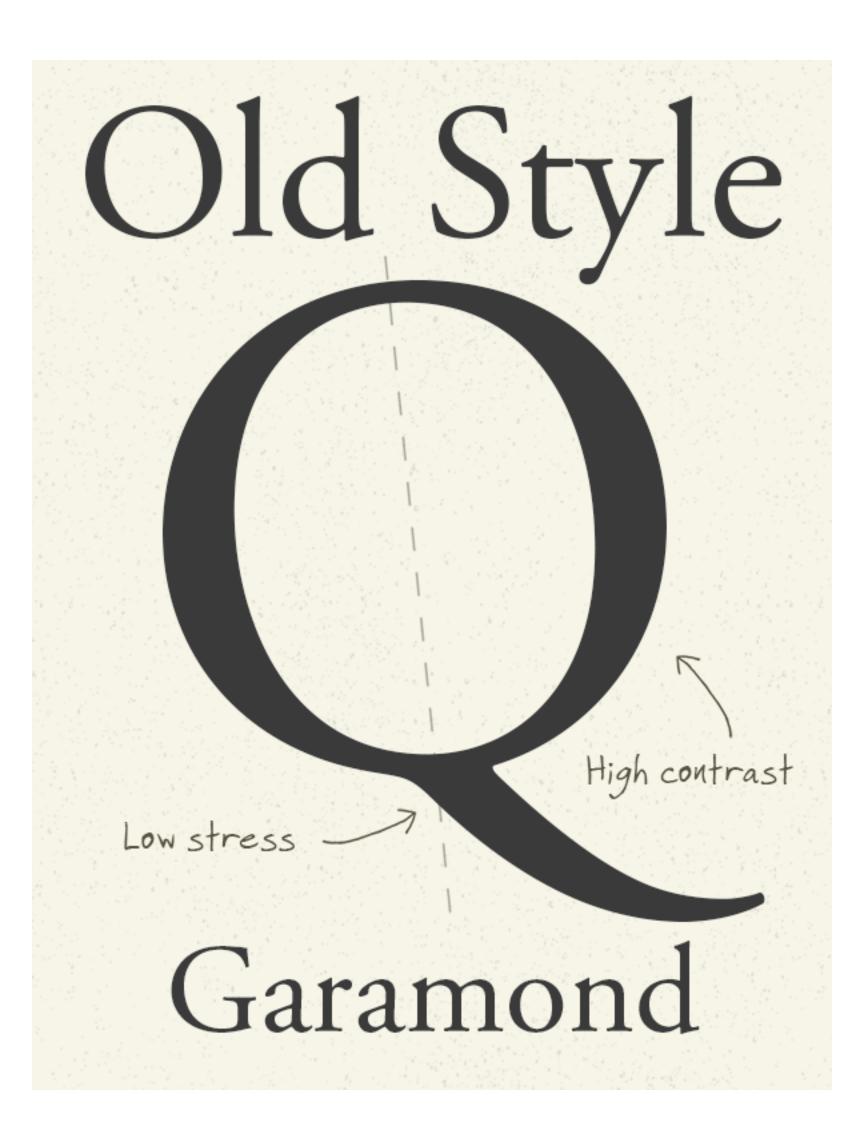
## **GOTHIC - 1400**



## HUMANIST - 1400



# **OLD STYLE - 1500 - 1700**





# TRANSITIONAL - 1700

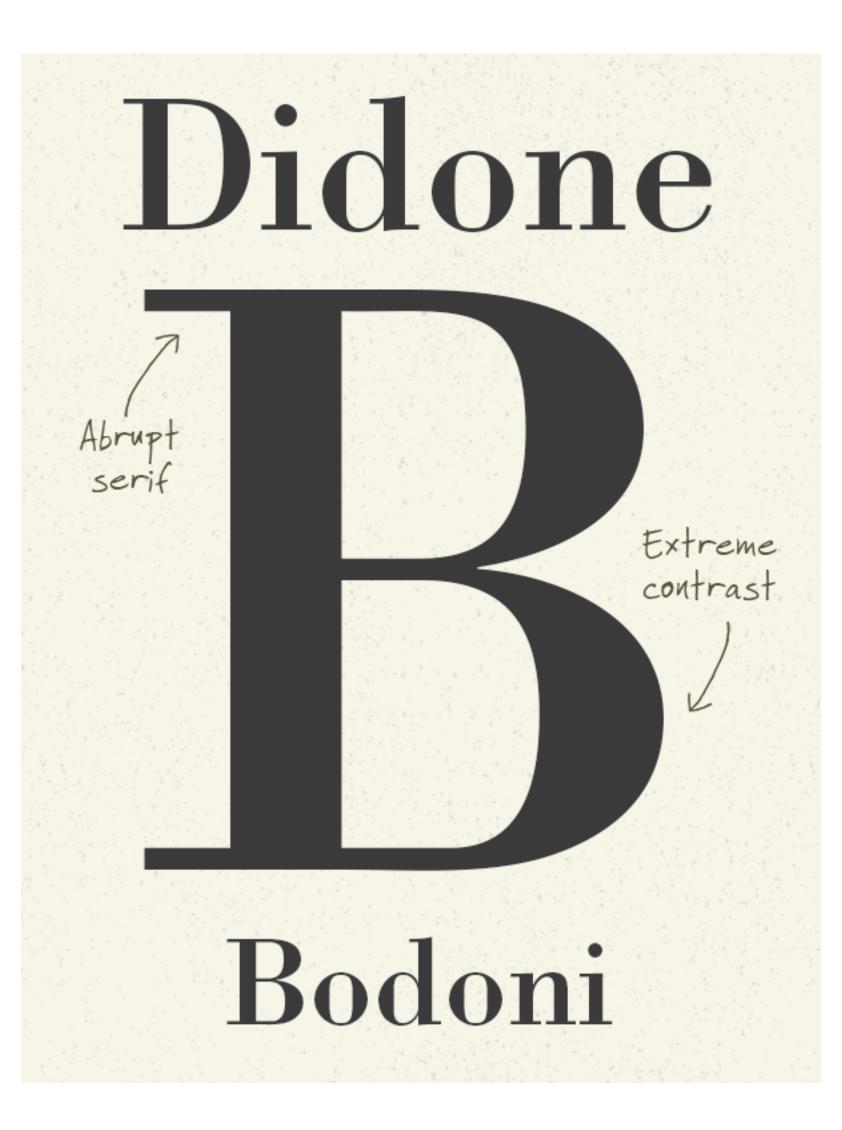
# Transitional

Vertical stress

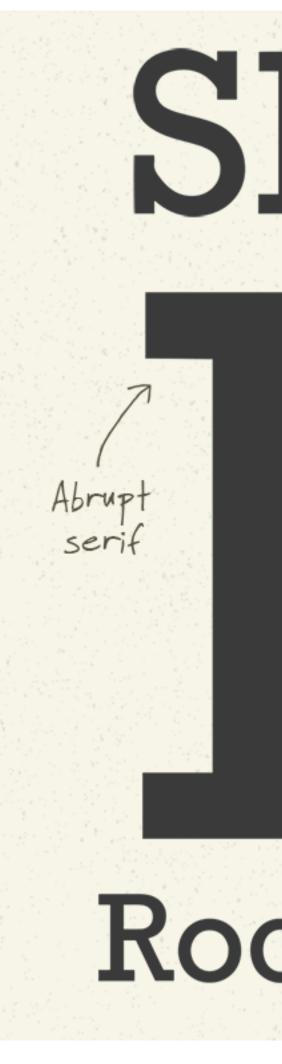
# Baskerville

High contrast

## **MODERN - 1800**

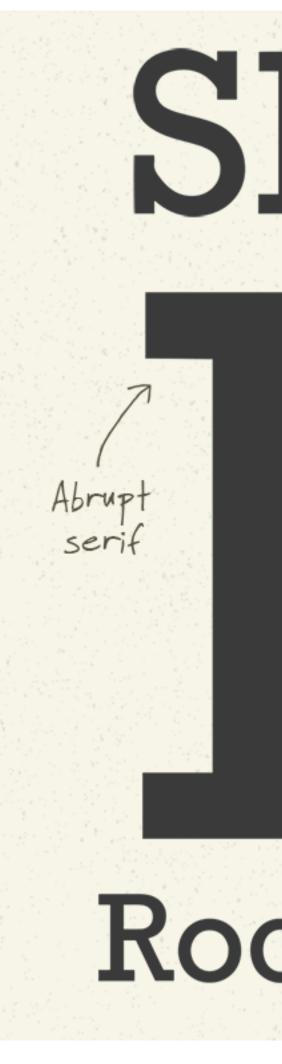


### **SLAB - 1900**



Slab Uniform stroke V Rockwell

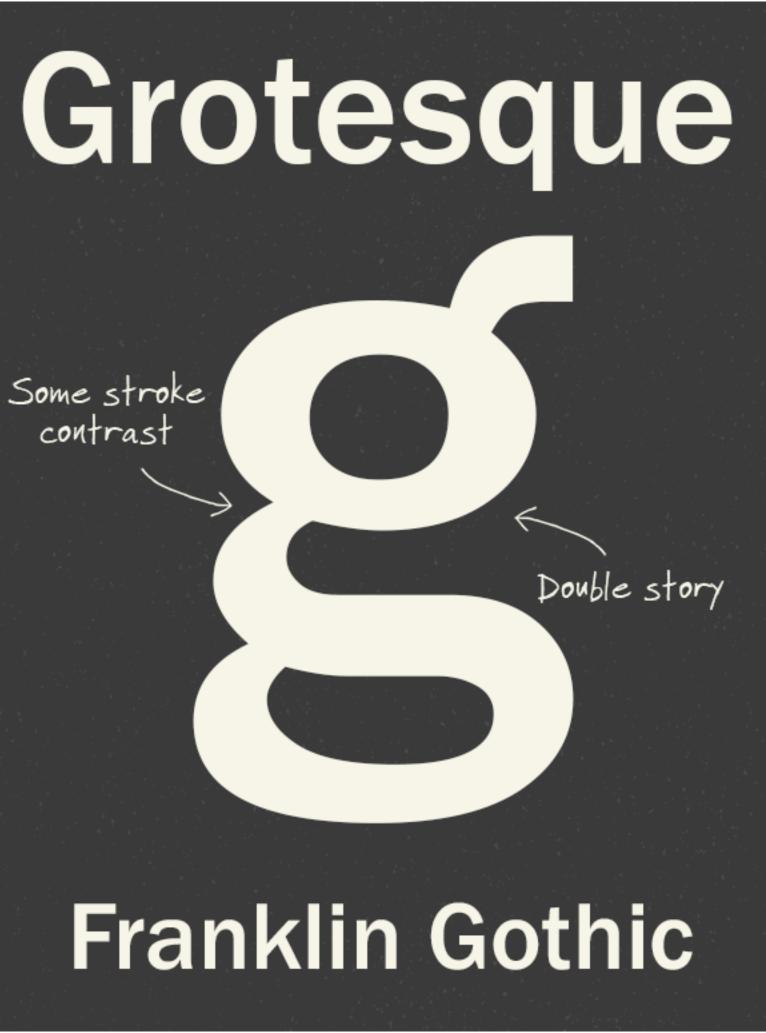
### **SLAB - 1900**



Slab Uniform stroke V Rockwell

# **GROTESQUE - EARLY 1900**

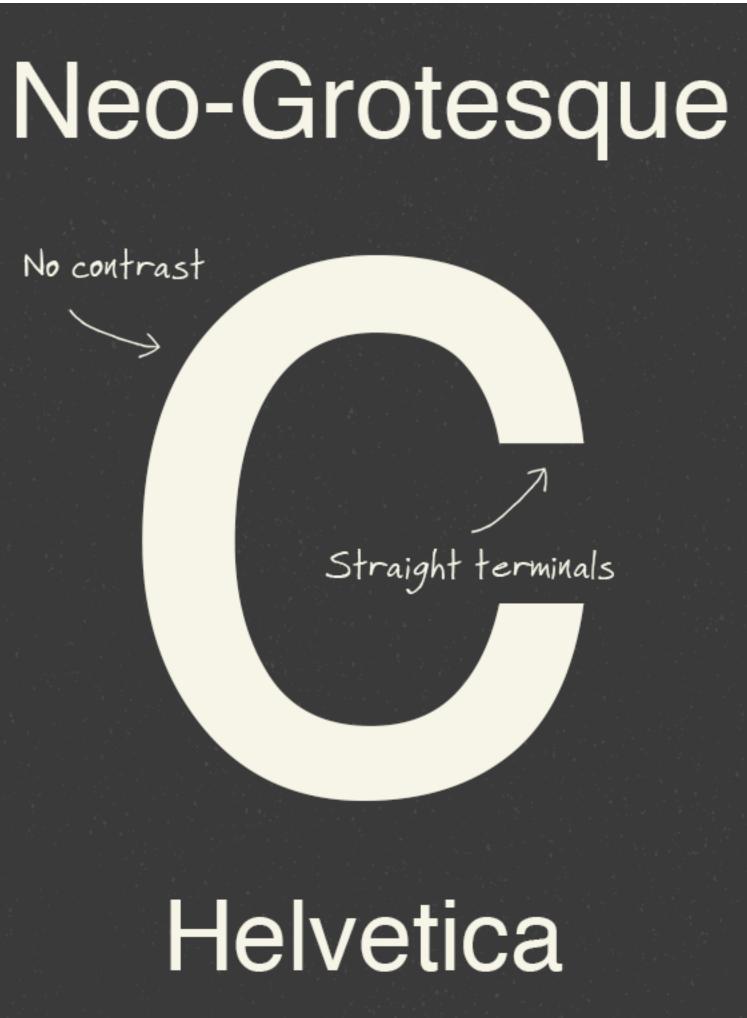
Some stroke contrast



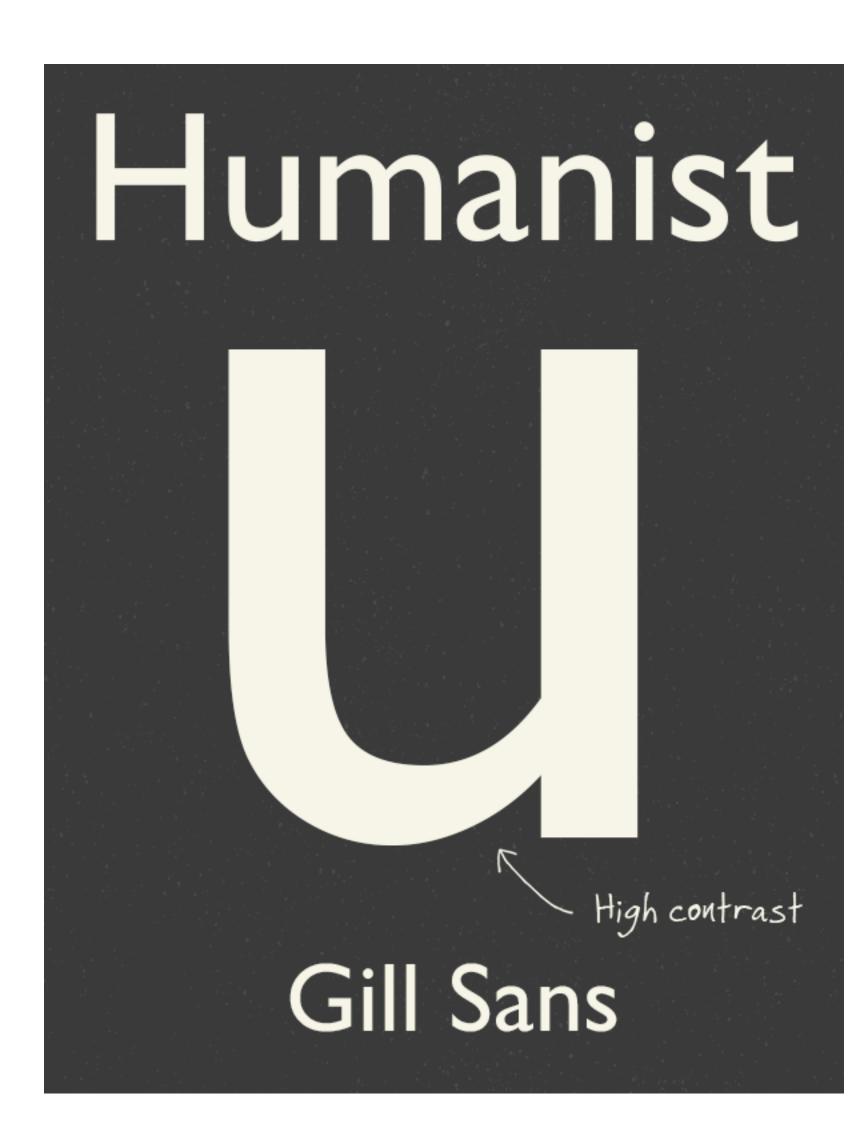
# NEO-GROTESQUE - LATE 1900

No contrast

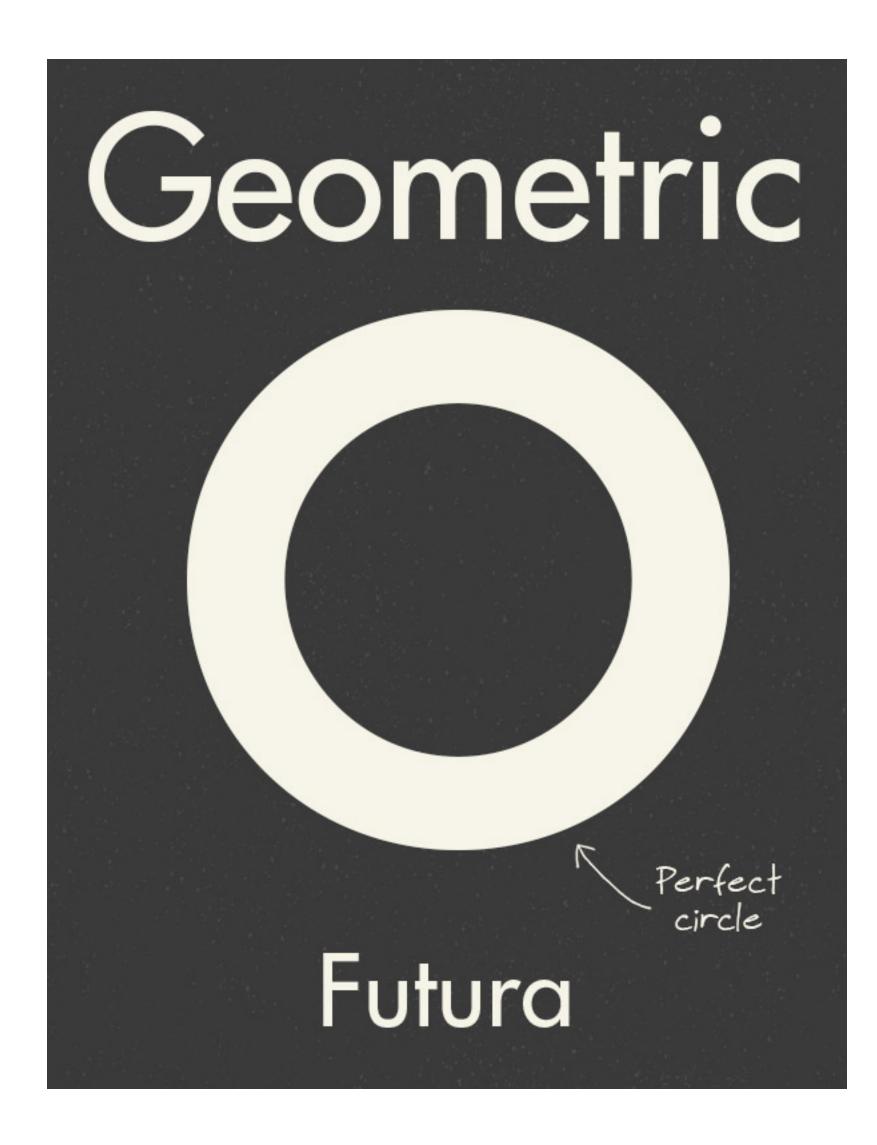


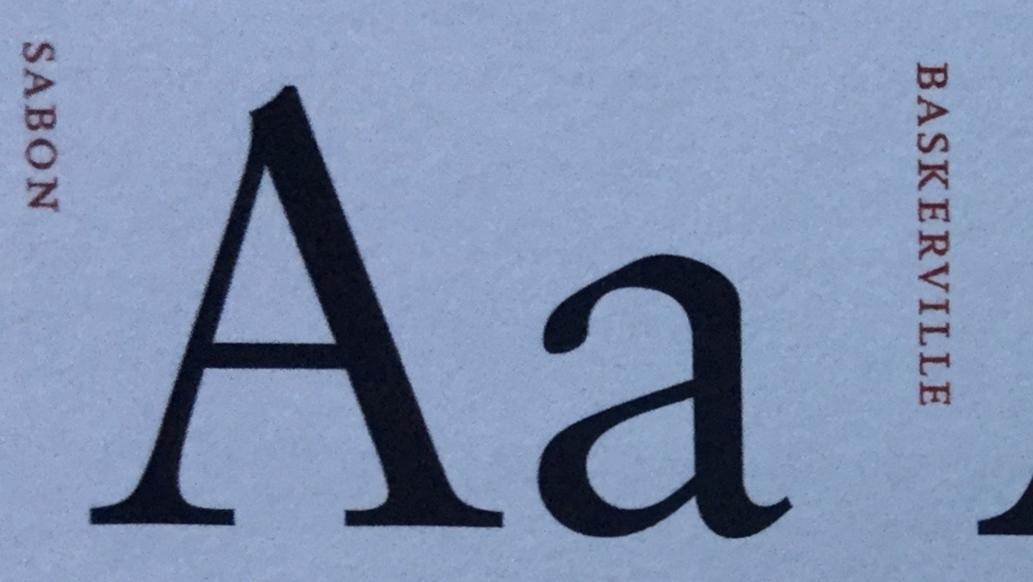


### HUMANIST- 1900

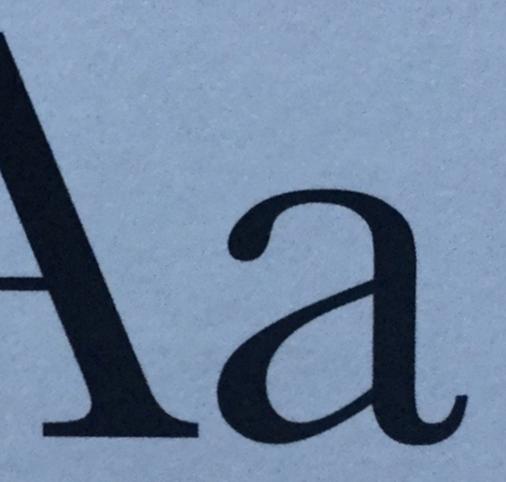


## GEOMETRIC- 1900



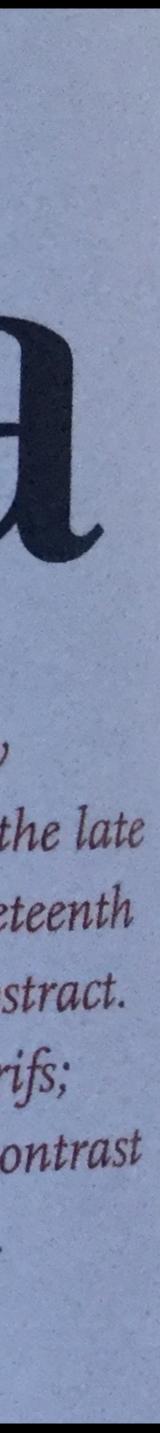


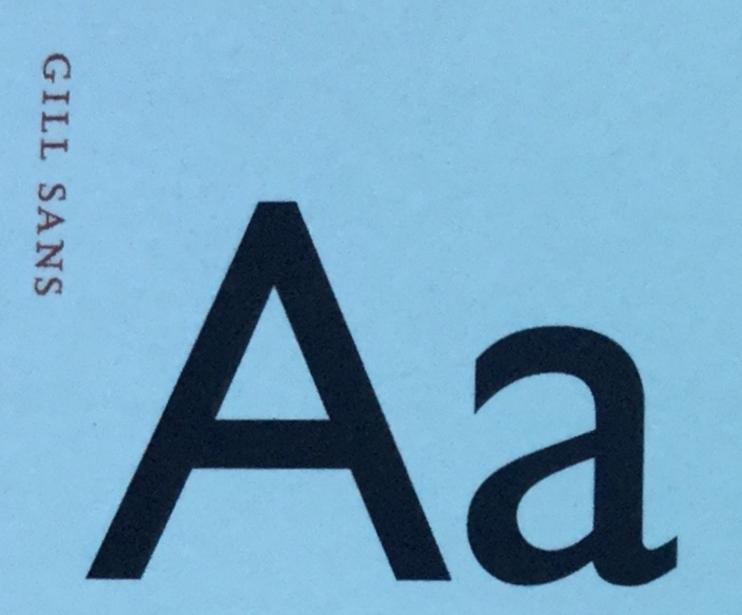
HUMANIST OR OLD STYLE The roman typefaces of the fifteenth and sixteenth centuries emulated classical calligraphy. Sabon was designed by Jan Tschichold in 1966, based on the sixteenth-century typefaces of Claude Garamond. TRANSITIONAL These typefaces have sharper serifs and a more vertical axis than humanist letters. When the typefaces of John Baskerville were introduced in the mideighteenth century, their sharp forms and high contrast were considered shocking.

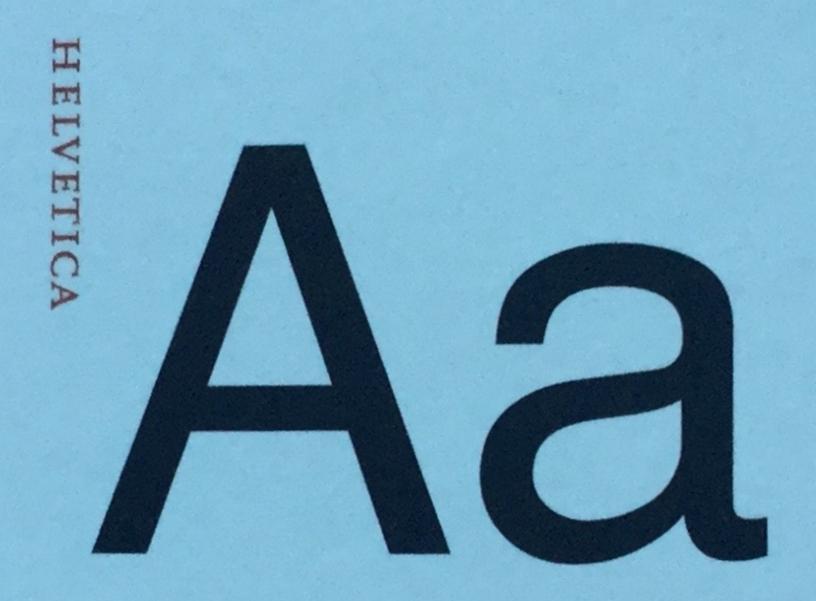


# BODONI

MODERN The typefaces designed by Giambattista Bodoni in the late eighteenth and early nineteenth centuries are radically abstract. Note the thin, straight serifs; vertical axis; and sharp contrast from thick to thin strokes.

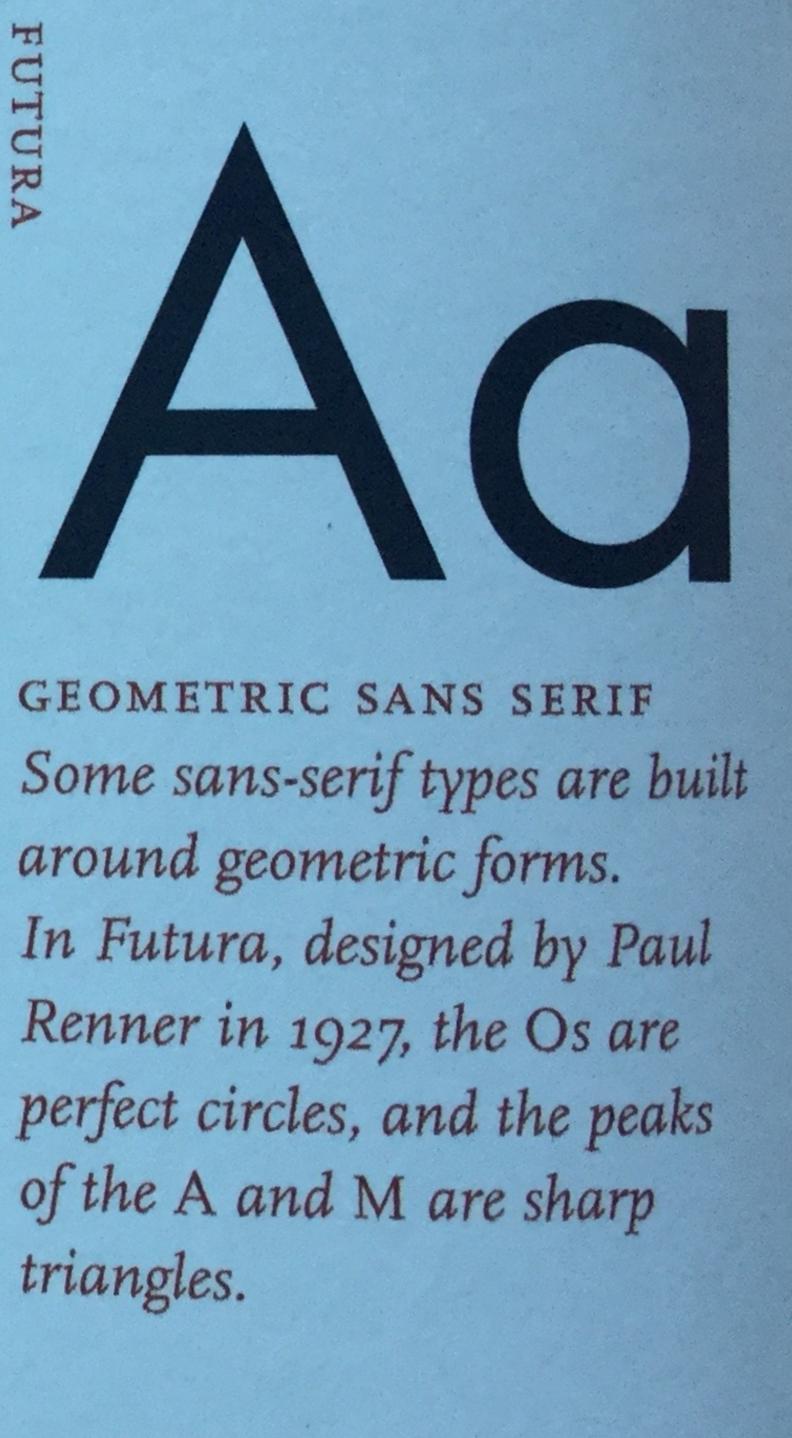






HUMANIST SANS SERIF Sans-serif typefaces became common in the twentieth century. Gill Sans, designed by Eric Gill in 1928, has humanist characteristics. Note the small, lilting counter in the letter a, and the calligraphic variations in line weight.

TRANSITIONAL SANS SERIF Helvetica, designed by Max Miedinger in 1957, is one of the world's most widely used typefaces. Its uniform, upright character makes it similar to transitional serif letters. These fonts are also referred to as "anonymous sans serif."

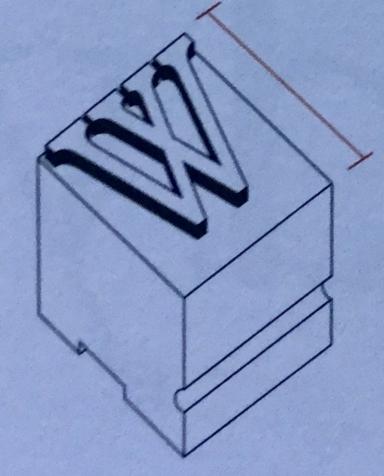




12 points equal 1 pica 6 picas (72 points) equal 1 inch



60-POINT SCALA A typeface is measured from the top of the capital letter to the bottom of the lowest descender, plus a small buffer space.



In metal type, the point size is the height of the type slug.





Rough guidelines

Display text Text Captions

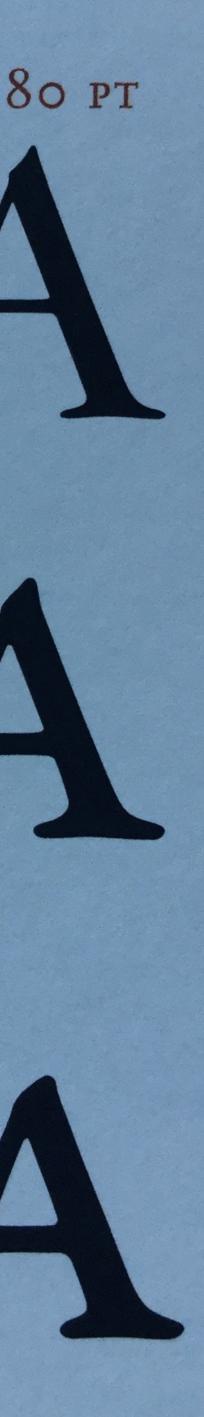
> 24 point9–14 point6–8 points

8 pt

A DISPLAY or *headline* style looks spindly and weak when set at small sizes. Display styles are intended for use at 24 pts. and larger.

Basic TEXT styles are designed for sizes ranging from 9 to 14 pts. Their features are strong and *meaty* but not too assertive.

CAPTION styles are built with the heaviest stroke weight. They are *designed* for sizes ranging from 6 to 8 pts.



# TYPE FAMILY

### standard

emphasis

integrates with text when full-size caps would stand out awkwardly

emphasis within a hierarchy

combinations

### The roman form is the core of

ADOBE GARAMOND PRO REGULAR

Italic letters, which are based of

ADOBE GARAMOND PRO ITALIC

ADOBE GARAMOND PRO REGULAR (ALL SMALL C

Bold (and semibold) typefa

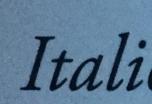
ADOBE GARAMOND PRO BOLD AND SEMIBOLD

Bold (and semibold) typefac

ADOBE GARAMOND PRO BOLD AND SEMIBOLD IT







TRUE ITALIC

Some italics aren't slanted at all. In the type family Quadraat, the italic form is upright. QUADRAAT, designed by Fred Smeijers, 1992.

### Italics are not slanted letters.

**TYPE CRIME:** 

**PSEUDO ITALICS** The wide, ungainly forms of these mechanically skewed letters look forced and unnatural.









### Proxima Nova Bold

### Slanted / Fake Italic







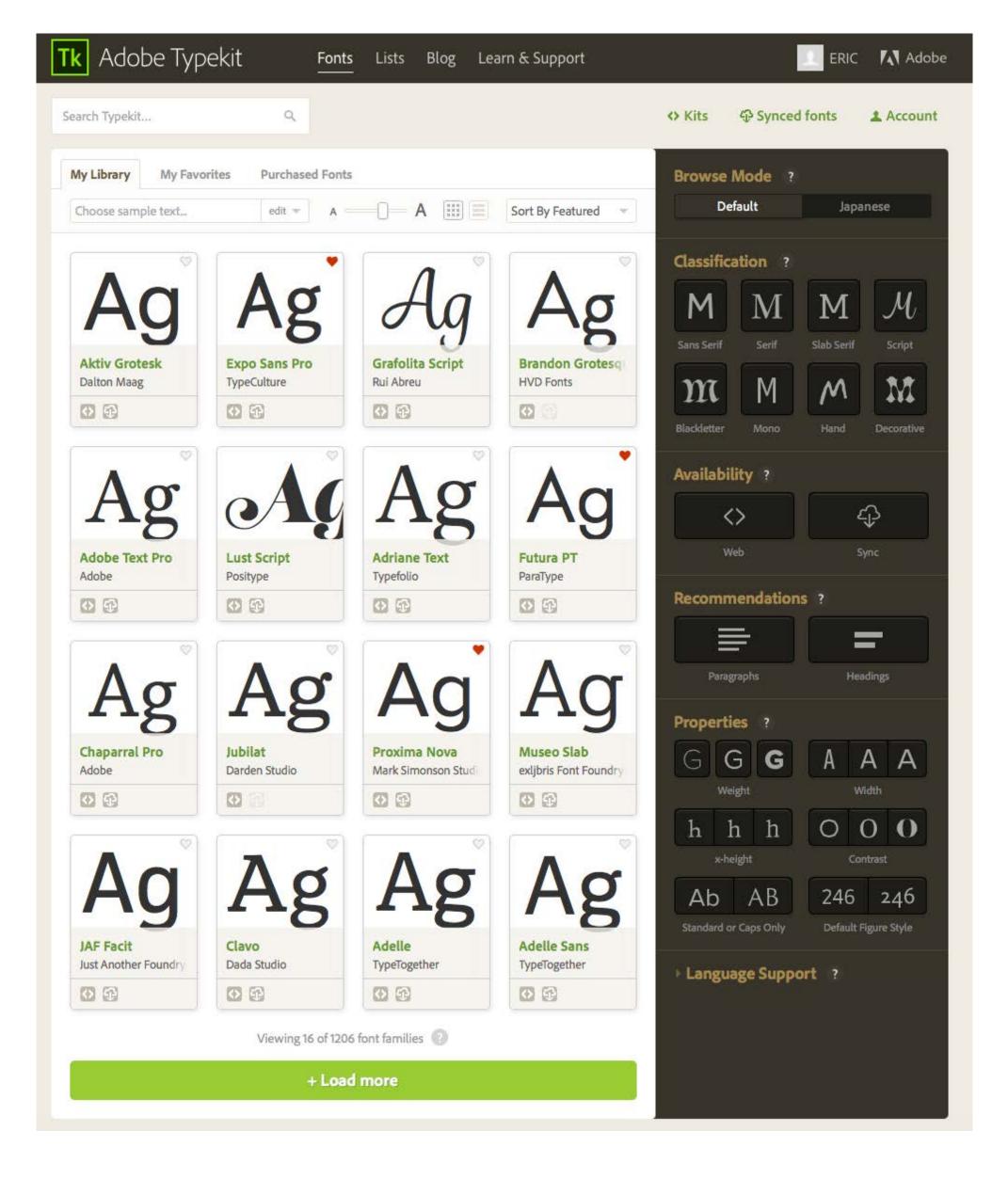


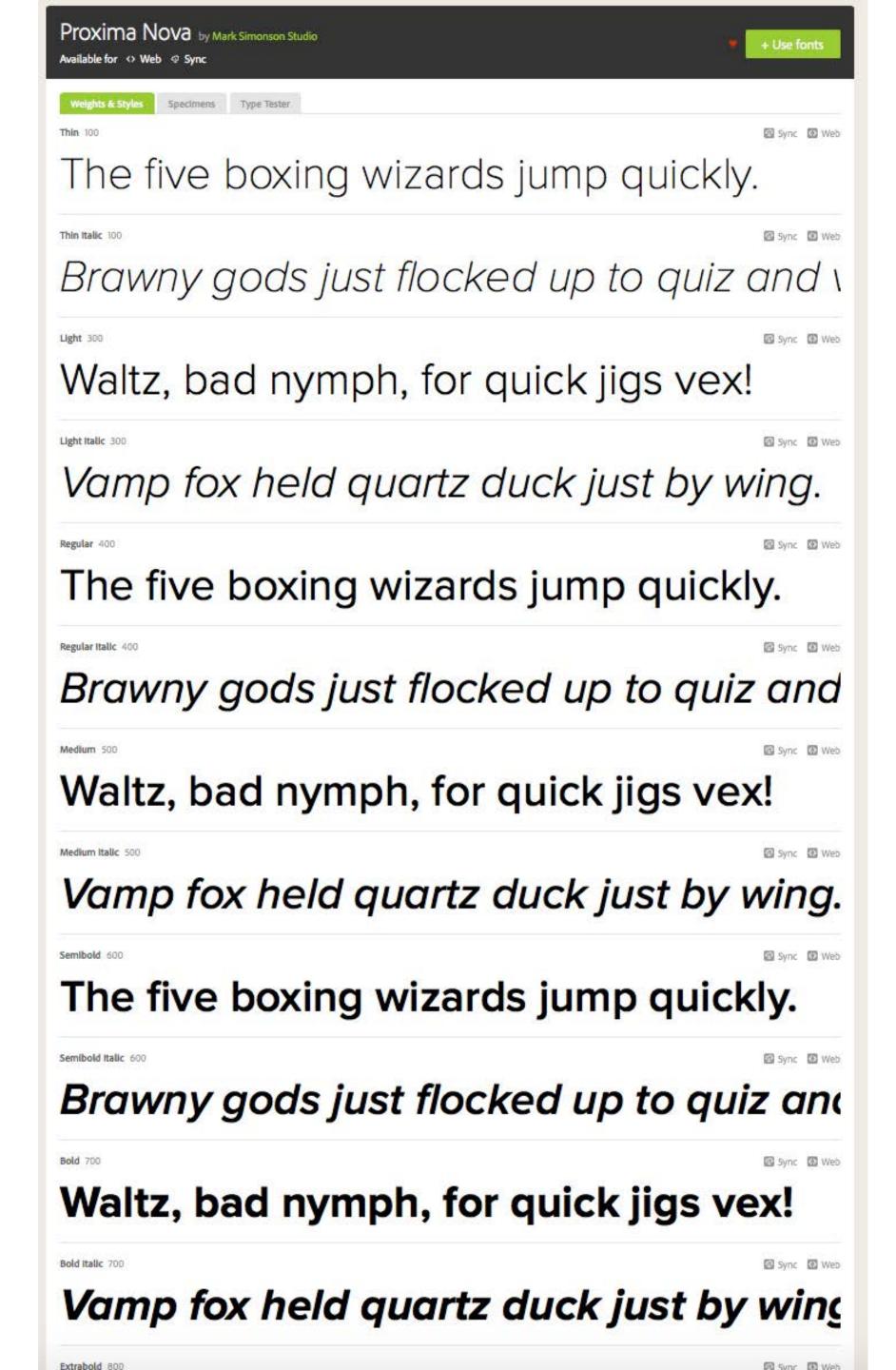
## **TYPE WEIGHT**

Helvetica Neue 25 Ultra Light Helvetica Neue 35 Thin Helvetica Neue 45 Light Helvetica Neue 75 Bold

# Helvetica Neue 55 Roman Helvetica Neue 65 Medium Helvetica Neue 85 Heavy Helvetica Neue 95 Black

# TYPE KIT





# SPACING

I dream of robot delights.

I dream of robot delights.

- I dream of robot delights.
- I dream of robot delights.
- I dream of robot delights.



# Proportional Monospace

**Letterspace** (tracking) — the consistent degree of increase (or sometimes decrease) of space between letters to affect density in a line or block of text.

**Kerning** – adjusting the spacing between characters in a proportional font, usually to achieve a visually pleasing result.



# CS160CS160CS160CS160Fall 2020Fall 2020Fall 2020Fall 2020



### CS160 User Interface Design



### Warning: Typography Crime



### Warning: **Typography Crime**



For indoor/Outdoor Use

End connector

### Warning: Typography Crime



- Centered text is symmetrical,
- like the facade of a classical building.
- Centered type often appears on invitations, title pages, certificates, and tomb stones. The edges of a centered column are often dramatically uneven. Center text should be broken to emphasize a key phrase
  - midterm tomorrow
  - rather that saying midterm
    - tomorrow
  - Breaking lines in this manner is called
    - breaking for sense.

such as



Justified text which has even edges on both left and right sides of the column, has been the norm since the invention of printing with movable type, which enabled the creation of page after page of straight-edged columns. In metal type setting the printer justified each line by hand using small metal spacers to alter spaces between words and letters and thus make all the lines the same length. Digital typesetting performs the same labor automatically. Justified type makes efficient use of space. It also creates a clean, compact shape on the page. Ugly gaps can occur, however, the line length is too short in relations to the size of type used.

In flush-left/ragged right text, the left-edge is hard and right edge soft. Word spaces to not fluctuate, so there are never big holes inside of the lines of text. This format, which was used primary for setting poetry before the twentieth century, respect the flow of language rather than submitting to the law of the box. Despite its advantages, however, the flush left format is fraught with danger Above all, the designer must work hard to control the appearance of the rag that forms along the right edge. A good rag looks pleasantly uneven, with no lines that are excessively long or short. A rag is considered bad when it looks too even or too uneven or when it begins to form regular shapes like wedged moons or diving boards.

Flush right / ragged left is a variant of the more familiar flush left setting. Flush right text is hard to read because it forces the reader's eye to find a new position at the start of each line. Used in smaller blocks, however, flush right text forms effective margin notes, sidebars, pull quotes, or passages that comment on the main body or image. A flush or ragged edge can suggest attraction or repulsion between chunks of information.

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A beautiful, Italian 1976 Moto Guzzi LeMans motorcycle poised and ready to roar into sonorous action



A beautiful, Italian 1976 Moto Guzzi LeMans motorcycle poised and ready to roar into sonorous action



### Prime Marks That robot is 5' 2" tall.

### Single or Double Quote It's a d

He said, "That's what she said."

It's a dog's life.

Warning: Typography Crime



- hyphen connects two things that are intimately related, usually words that function together as a single concept or work together as a joint modifier

tie-in, toll-free call, two-thirds

away from that sentence—as I've done here. (option+shift+hyphen)

- en dash connects things that are related to each other by distance (option+hyphen) 147–48, pre–World War II, May–September not May-September
  - em dash allows additional thought to be added within a sentence by sort of breaking



killing my buzz.

He lived 1890–1941. Kapek lived longer (1891-1956).

It's ok to be second-best, but never, ever second-best.

### Warning: **Typography Crime**

### These interruptions—especially the snide remarks--are

# **EXPRESSING HIERARCHY**

requires only one signal. Italic is the standard form of families, dust the sizes so the x-heights align. xx

Emphasizing a word or phrase within a body of text usually emphasis. There are many alternatives, however, including boldface, SMALL CAPS, or a change in color. You can also create emphasis with a different font. If you want to mix font

# **EXPRESSING HIERARCHY**

Division of angels A. Angel B. Archangel C. Cherubim D. Seraphim Ruling body of clergy Π A. Pope B. Cardinal C. Archbishop D. Bishop Parts of a text III A. Work B. Chapter C. Section **D.** Subsection

symbols, indents and linebreaks Division of angels Angel Archangel Cherubim Seraphim Ruling body of clergy Pope Cardinal Archbishop Bishop Parts of a text Work Chapter Section Subsection

indents and line breaks only

### DIVISION OF ANGELS

Angel Archangel Cherubim Seraphim

RULING BODY OF CLERGY Pope Cardinal Archbishop Bishop

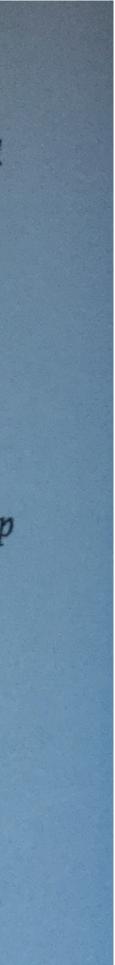
PARTS OF A TEXT Work Chapter Section Subsection

font change, indents, and line breaks angel DIVISION archangel OF ANGELS cherubim seraphim

pope RULING BODY cardinal OF CLERGY archbishop bishop

> work PARTS OF chapter A TEXT section subsection

alignment, font change, and line breaks



### **COMBINING TYPE: CONCORDANT**

# Typography

### FROM WIKIPEDIA, THE FREE ENCYCLOPEDIA

Typography is the art and technique of arranging type, type design, and modifying type glyphs. Type glyphs are created and modified using a variety of illustration techniques. The arrangement of type involves the selection of typefaces, point size, line length, leading (line spacing), adjusting the spaces between groups of letters (tracking) and adjusting the space between pairs of letters (kerning).

Adobe Caslon Semibold **48** pt

Adobe Caslon Smallcaps, 14 pt

Adobe Caslon Regular, 12 pt

### **COMBINING TYPE: CONTRASTING**

## lypography From Wikipedia, the free encyclopedia

Typography is the art and technique of arranging type, type design, and modifying *type* glyphs. Type glyphs are created and modified using a variety of illustration techniques. The arrangement of type involves the selection of typefaces, point size, line length, leading (line spacing), adjusting the spaces between groups of letters (tracking) and adjusting the space between pairs of letters (kerning).

Gill Sans Light **48** pt

Gill Sans Light, 16 pt

UC Berkeley OldStyle, I2 pt

## **COMBINING TYPE: CONFLICTING**

# Typography

From Wikipedia, the free encyclopedia

Typography is the art and technique of arranging type, type design, and modifying type glyphs. Type glyphs are created and modified using a variety of illustration techniques. The arrangement of type involves the selection of typefaces, point size, line length, leading (line spacing), adjusting the spaces between groups of letters (tracking) and adjusting the space between pairs of letters (kerning).

Arial 36 pt

Futura Medium, 14 pt

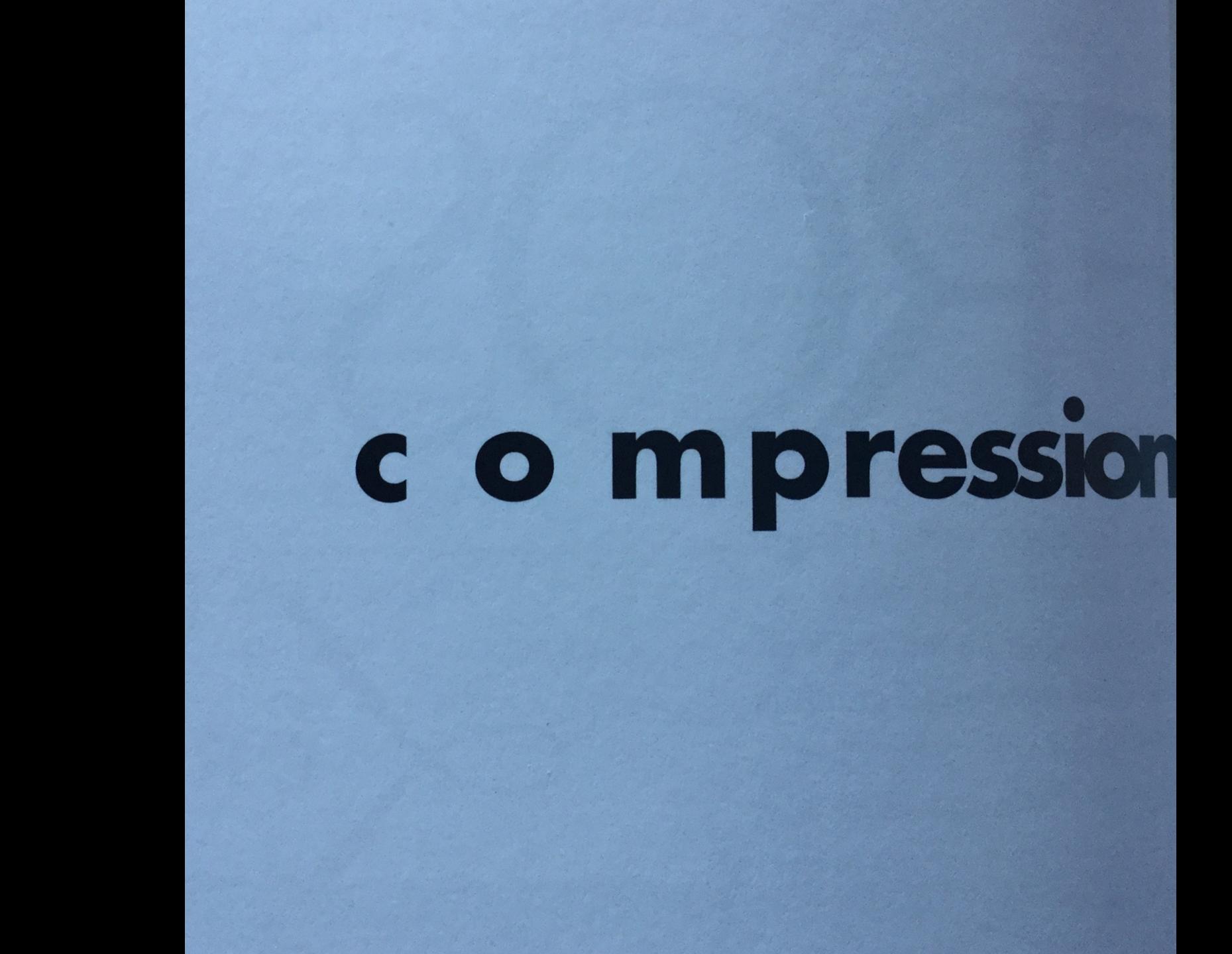
Myriad Regular, 12 pt

# sition

# transit







# **TYPE FAMILY**

Warning: **Typography Crime** 



# Government Accountability Office



# Headquarters

**US Army Corps** of Engineers

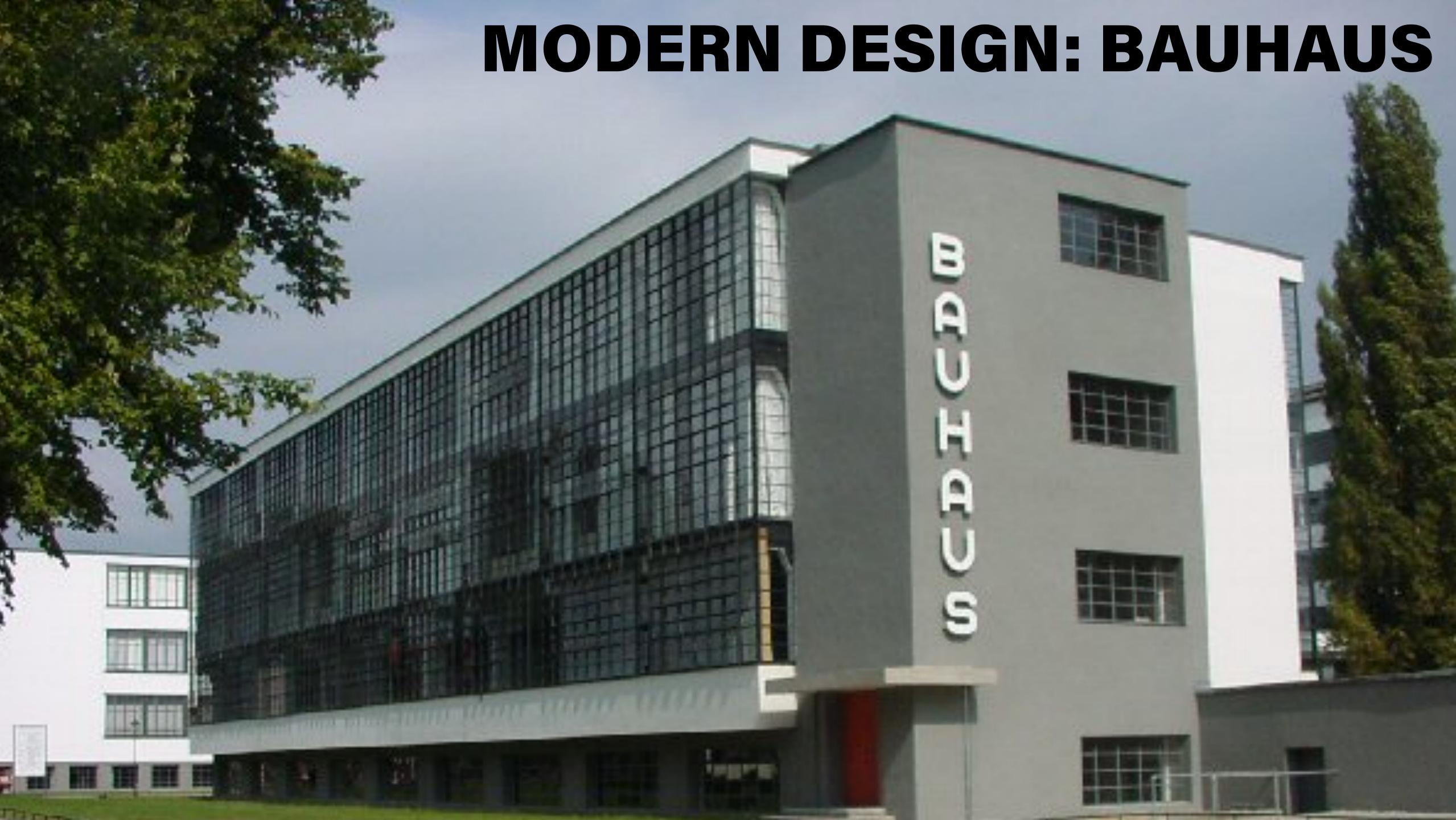




UPLINK ACTY AUTO	TEMP GIMBAL LOCK	the second	COMP	PROG	VERB	+	7	8	9	CLR	
HOLD	PROG		VERB	NOUN						and the	
FREE	RESTART		•	· .		-	4	5	6	OTON	
NO ATT	TRACKER				NOUN		_		L .	STBY	
STBA		1			-	0				-	
KEY REL	OPR ERR	1	1		•	° I		2	3	KEY	

## **GRAPHIC DESIGN HISTORY**





# BAUHAUS



### ARCHITEKTUR

LICHTBILDER

VORTRAG

### PROFESSOR HANS POELZIG



### FREITAG 26 FEBRUAR

ABDS 8H IN DER AULA DES FRIEDRICH - GYMNASIUM

KARTEN VOR VERKAUF BE ALLNER OLBERG O RAUCH

DER KREIS DER FREUNDE DES BAUHAUSES

# abcdefghi JKlmnopqr STUVWXYZ

HERBERT BAYER: Abb. 1. Alfobet unfertig zu betrachten

**Belspiel eines Zeichens** In größerem Maßstab Präxise optische Wirkung

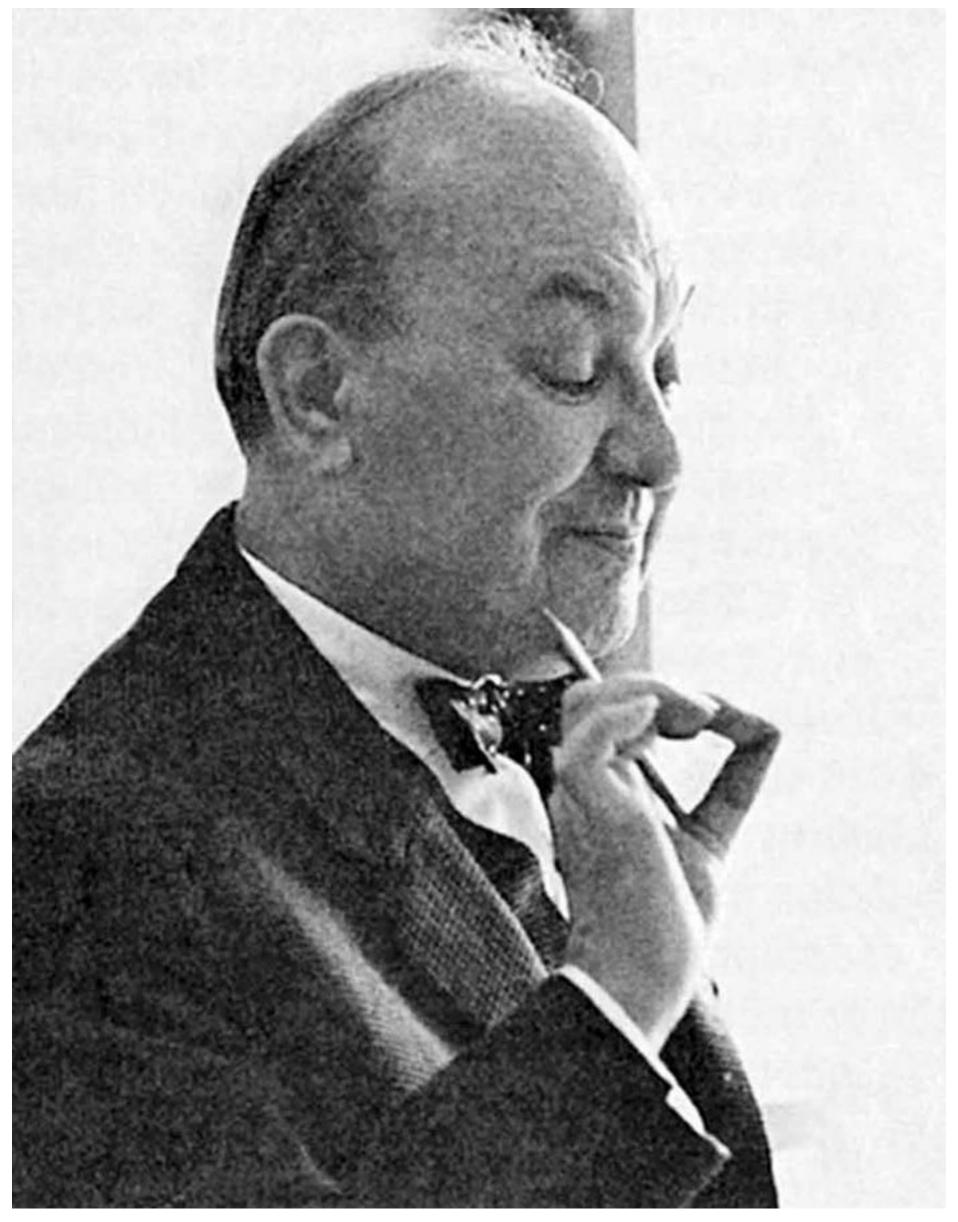
## sturm blond

Abb. 2. Anwendung

**BAUHAUS WEIMAR** AUSSTELLUNG







**OBJECTIVE** COMPELLING SIMPLE **SHORT** FUNCTIONAL

Communication in the modern age should be

## TYPOGRAPHY

and and

Contraction of the local division of the loc

1000

In the 1920s and 1930s, the so-called New Typography movement brought graphics and information design to the forefront of the artistic avant-garde in Central Europe. The New Typography, an installation of posters and numerous small-scale works, is drawn from MoMA's rich collection of Soviet Russian, German, Dutch, and Czechoslovakian graphics.

MOVE THE ELEMENTS ON THIS 12.23.2009 ZWART PAGE TO CREATE YOUR OWN NEW TYPOGRAPHY COMPOSITION. BAYER DOUBLE-CLICK TO ROTATE. SUTNAR 07.26.2010 CHUITEMA TSCHICHOLD RODCHENKO SCHWITTERS IOMA ARTISTS MOVEMENT HOME VISIT

THE FIRST ENGLISH TRANSLATION OF THE

**REVOLUTIONARY 1928 DOCUMENT** 

TRANSLATED FROM THE GERMAN BY RUARI MCLEAN INTRODUCTION BY ROBIN KINROSS WITH A NEW FOREWORD BY RICHARD HENDEL

## JAN TSCHICHOLD THE NEW TYPOGRAPHY





DER SIEG

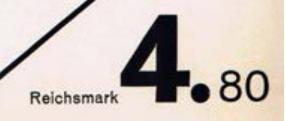
#### Ein Buch vom Sport

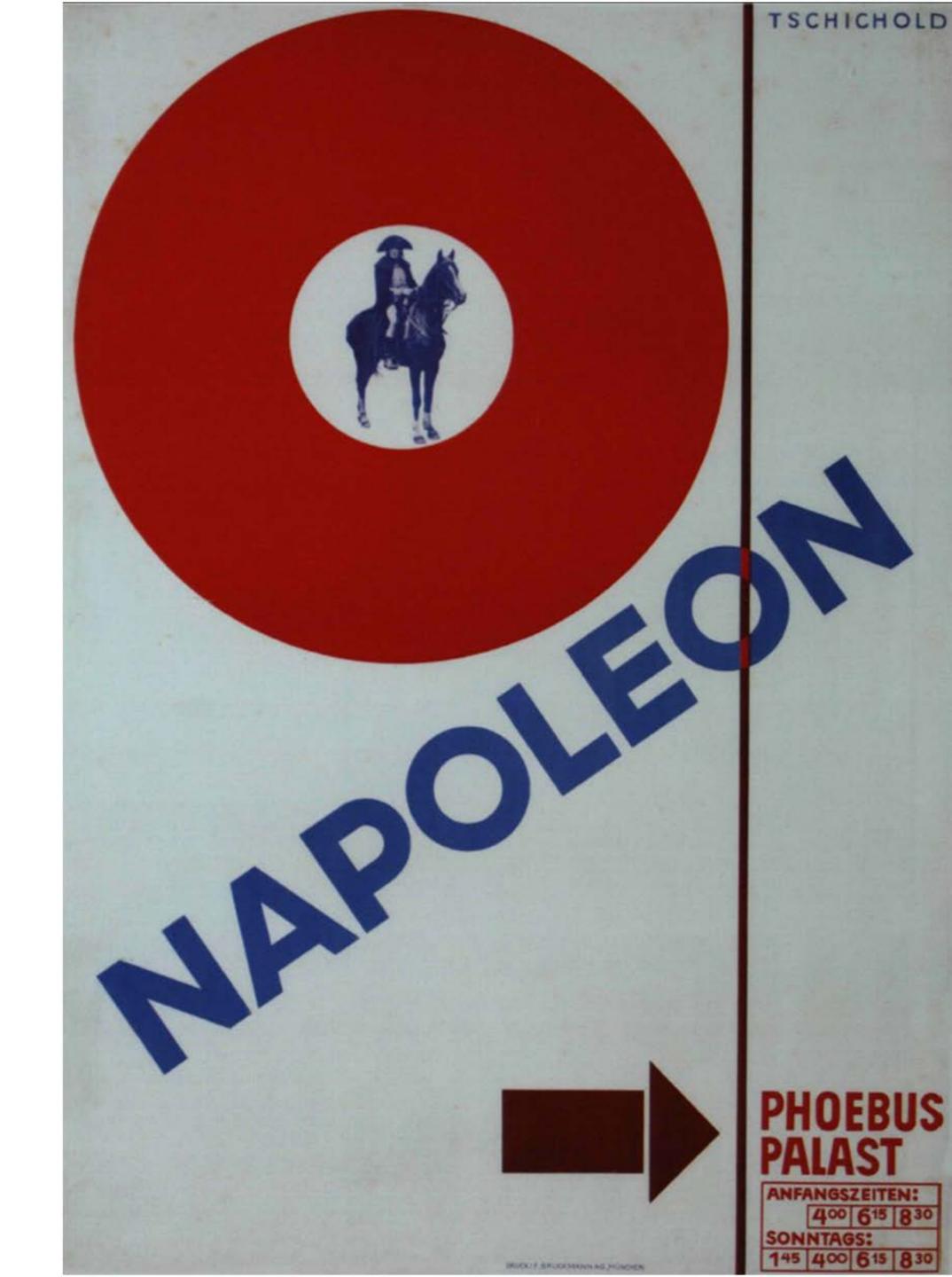
Herausgegeben von Günter Mamlok und Sergius Sax 320 Seiten Umfang 422 herrliche Bilder

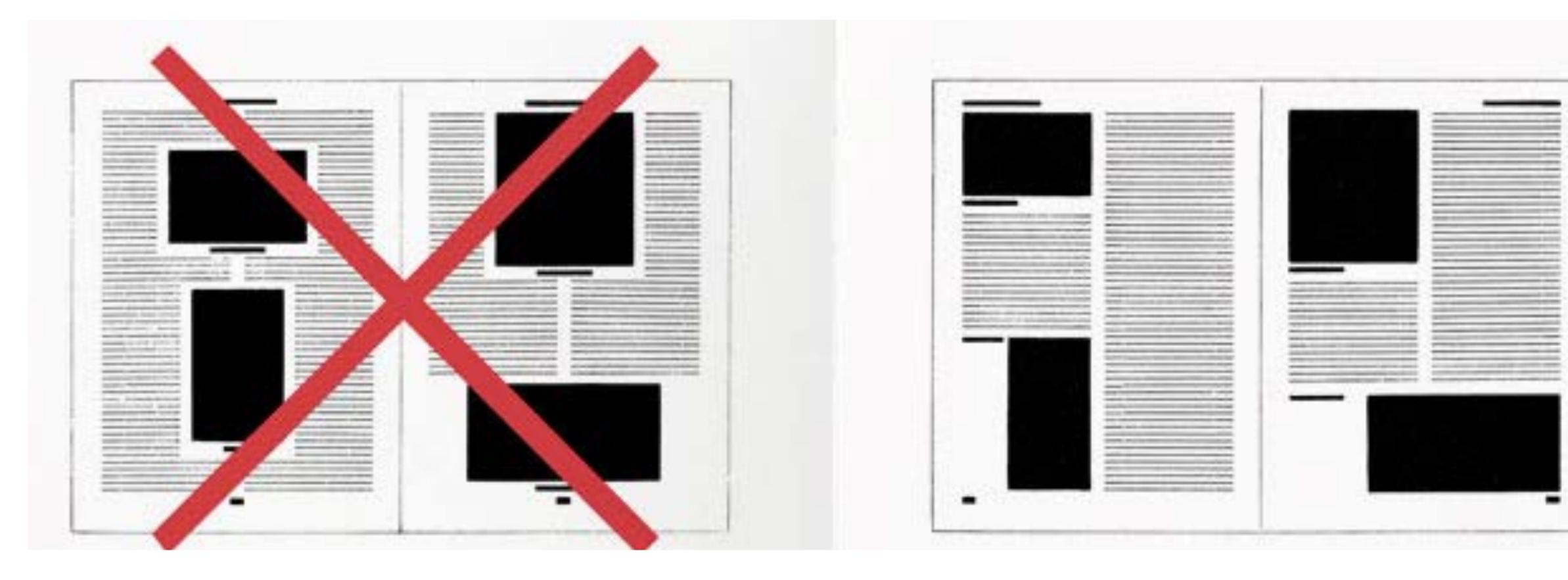
3

Die besten Sportschriftsteller schrieben einen packenden Text Die mitreißende Chronik unvergeßlicher Siege aus allen Sportarten

Geleitwort von Staatssekretär a.D. Dr. Lewald







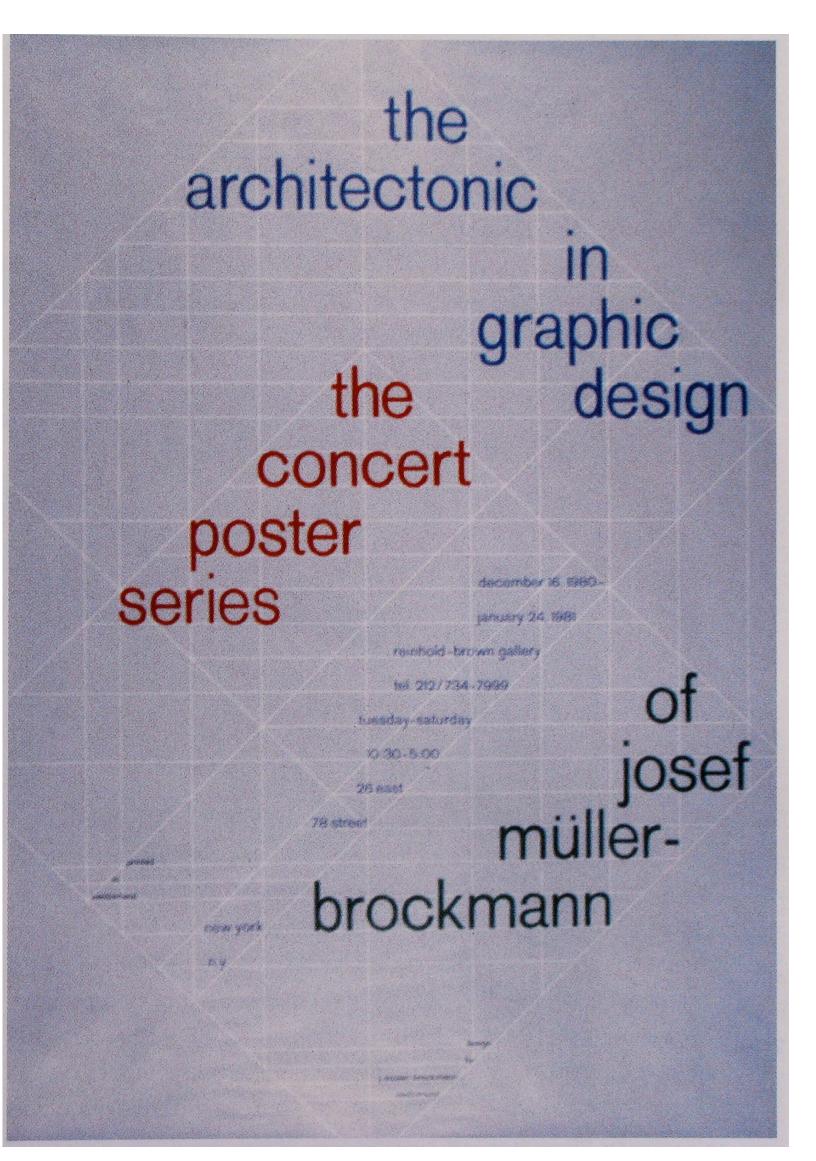


LEIPZIGER Alloemeine / luftermeffe mit Technifch r Meffe und Ba uneffe Die allgemeir e'internationale Messe D'autschlands Die erfte und größte Meffe der Welt. Für Ausstelle und Einkäufer pleic wichtig. BEGINN DER HERBST. LESSE AM 27 AUGUST 1922. Auskunft erteilt und Ar neldungen nimmt entgegen\_ MESSAMT FÜR TIE MUSTERMESSEN IN EIDZIG

#### Before: Tschichold, Leipzig Trade Fair, 1922



After: Tschichold, Elemental Typogrphay, 1925







"We shall not cease from exploration and at the end of our exploring will be to arrive where we started and know the place for the first time."

#### Websites

**Welve South** 

Back Yard Burger

Foster Mobley Greener Solutions

Identity

# Elements & Principles®

### About

I love good/clean design and have an obsession with finding new music which sparked Designers MX. I live in Franklin, TN and work in Nashville as an Art Director at Paramore I the digital agency. I post my designs to Dribbble, photos to Flickr, videos to Vimeo, deep thoughts to Twitter, and inspiration to del.icio.us

Since graduating from MTSU in 2003 with a major in Graphic Design and a minor in Photography, I've been fortunate enough to work with the best of them. I began my career as a designer at The Buntin Group, a large agence in Nashville. From there, I moved on to become an in-house designer for the Nashville Convention & Visitors Bureau. At that point, I decided to start m clients. I needed to continue to push myself. That's about the time that Paramore caught my eye, which brings us full circle

#### Awards

AIGA 'Best of' CASE Award

.Net 'Mobile Site of the Month

AIGA CASE Award

Net 'Site of the Month'

AIGA CASE Award

American Graphic Design Award

AAF Nashville Gold Addy

AAF Nashville Silver Addy

AAF Nashville Gold Addy

elannashville.com "Post-It Notes Campaign"

AAF Nashville Silver Addy

AAF Nashville Gold Addy

AAF Nashville Silver Addy

American Graphic Design Award

AAF Nashville Gold Addy

AAF Nashville Gold Addy

American Graphic Design Award

AAF Nashville Gold Star Award

AAF Nashville Gold Star Award

Bases 615 804 5354 Elements 615 804 5354 Elements blake@blakeallendesign.com twitter flickr vimeo © 2010 Blake Allen Design. All Rights Reserved. Thanks for stopping by

A grid can be simple or complex, specific or generic, tightly defined or loosely interpreted. Typographic grids are all about control. They establish a system for arranging content within the space of page, screen, or built environment. Designed in response to the internal pressures of content (text, image, data) and the outer edge or frame (page, screen, window), an effective grid is not a rigid formula but a flexible and resilient structure, a skeleton that moves in concert with the muscular mass of content. Grids belong to the technological framework of typography, from the concrete modularity of letterpress to the ubiquitous rulers, guides, and coordinate systems of graphics applications. Although software generates illusions of smooth curves and continuous tones, every digital image or mark is constructed-ultimately-from a grid of neatly bounded blocks. The ubiquitous language of the gui (graphical user interface) creates a gridded space in which windows overlay windows. In addition to their place in the background of design production, grids have become explicit theoretical tools. Avant-garde designers in the 1910s and 1920s exposed the mechanical grid of letterpress, bringing it to the polemical surface of the page. In Switzerland after World War II, graphic designers built a total design methodology around the typographic grid, hoping to build from it a new and rational social order. The grid has evolved across centuries of typographic evolution. For graphic designers, grids are carefully honed intellectual devices, infused with ideology and ambition, and they are the inescapable mesh that filters, at some level of resolution, nearly every system of writing and reproduction. A grid can be simple or complex, specific or generic, tightly defined or loosely interpreted. Typographic grids are all about control. They establish a system for arranging content within the space of page, screen, or built environment. Designed in response to the internal pressures of content (text, image, data) and the outer edge or frame (page, screen, window), an effective grid is not a rigid formula but a flexible and resilient structure, a skeleton that moves in concert with the muscular mass of content. Grids belong to the technological framework of typography, from the concrete modularity of letterpress to the ubiquitous rulers, guides, and coordinate systems of graphics applications. Although software generates illusions of smooth curves and continuous tones, every digital image or mark is constructed-ultimately-from a grid of neatly bounded blocks. The ubiquitous language of the gui (graphical user interface) creates a gridded space in which windows overlay windows. In addition to their place in the background of design production, grids have become explicit theoretical tools. Avant-garde designers in the 1910s and 1920s exposed the mechanical grid of letterpress, bringing it to the polemical surface of the page In Switzerland after World War II, graphic designers built a total design methodology around the typographic grid, hoping to build from it a new and rational social order. The grid has evolved across centuries of typographic evolution. For graphic designers, grids are carefully honed intellectual devices, infused with ideology and ambition, and they are the inescapable mesh that filters, at some level of resolution, nearly every system of writing and reproduction. A grid can be simple or complex, specific or generic, tightly defined or loosely interpreted. Typographic grids are all about control. They establish a system for arranging content within the space of page, screen, or built environment. Designed in response to the internal pressures of content (text, image, data) and the outer edge or frame (page, screen, window), an effective grid is not a rigid formula but a flexible and resilient structure, a skeleton that moves in concert with the muscular mass of content. Grids belong to the technological framework of typography, from the

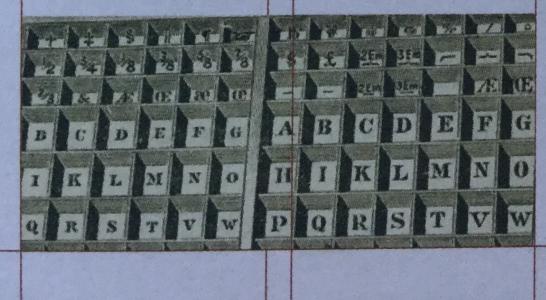
#### Grid systems

A grid can be simple or complex, specific or generic, tightly defined or loosely interpreted. Typographic grids are all about control. They establish a system for arranging content within the space of page, screen, or built environment. Designed in response to the internal pressures of content (text, image, data) and the outer edge or frame (page, screen, window), an effective grid is not a rigid formula but a flexible and resilient structure, a skeleton that moves in concert with the muscular mass of content. Grids belong to the technological framework of typography, from the concrete modularity of letterpress to the ubiquitous rulers, guides, and coordinate systems of graphics applications. Although software generates illusions of smooth curves and continuous tones, every digital image or mark is constructed—ultimately—from a grid of neatly bounded blocks. The ubiquitous language of the

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The typographic grid is a proportional regulator for composition, tables, pictures, etc. It is a formal programme to accommodate x unknown items. The typographic grid is a proportional regulator for composition, tables, pictures, etc. It is a formal programme to accommodate x unknown items.





MAIN HEADLINE 32/48 pt Scala Sans Pro Bold

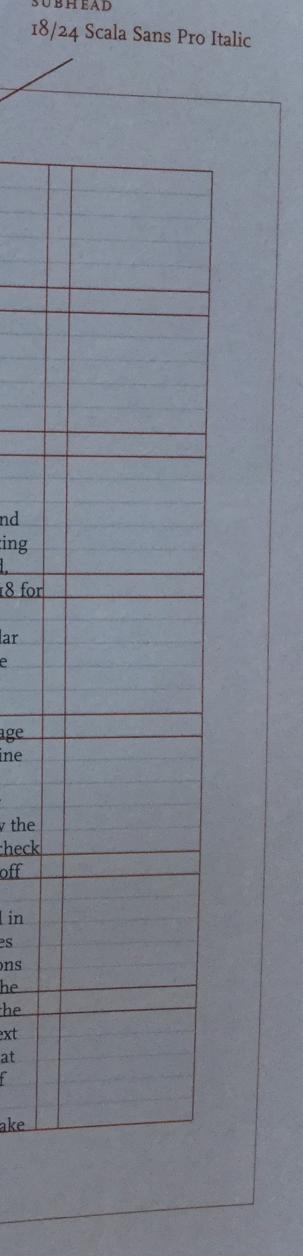
SUBHEAD

### baseline grids create a common rhythm

aptions and other	Modular grids are created by	bottom page margins to absorb
etails are styled	positioning horizontal guidelines in	leftover lines.
o coordinate with	relation to a <i>baseline</i> grid that governs	To style headlines, captions, and
he dominant base-	the whole document. Baseline grids	other elements, choose line spacing
ne grid.	serve to anchor all (or nearly all)	that works with the baseline grid,
	elements to a common rhythm.	such as 18/24 for headlines, 14/18 for
	Create a baseline grid by choosing	subheads, and 8/12 for captions.
	the typesize and leading of your text,	(Web designers can choose similar
	such as 10-pt Scala Pro with 12 pts	increments (line height) to create
	leading (10/12). Avoid auto leading so	style sheets with coordinated
	that you can work with whole	baselines.)
	numbers that multiply and divide	Where possible, position all page
	cleanly. Use this line space increment	elements in relation to the baseline
	to set the baseline grid in your	grid. Don't force it, though.
	document preferences. Adjust the top	Sometimes a layout works better
	or bottom page margin to absorb any	when you override the grid. View the
	space left over by the baseline grid.	baseline grid when you want to check
	Determine the number of	the position of elements; turn it off
	horizontal page units in relation to	when it's distracting.
	the numer of lines in the baseline	InDesign, set the baseline grid in
	grid. Count how many lines fit in a	the Dreferences>Grids and Guides
	full column of text and then choose a	window. Create horizontal divisions
	number that divides easily into the	in Layout>Create Guides. Make the
	line count to create horizontal page	horizontal guides correspond to the
	divisions. A column with forty-two	h 1's an of the nave S Ullillary cont
	lines of text divides neatly into seven	h Langing 2 milmilet of 1000 date
	horizontal modules with six lines	linidog evenly into the mumber of
	each. If your line count is not neatly	lines in a full column of text.
	divisible, adjust the top and/or	Working in InDesign, you can make
	divisible, aujust the top	

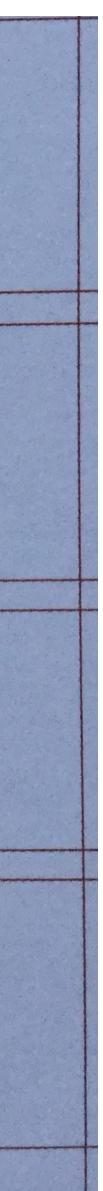
CAPTION 9/12 Scala Sans Pro Italic

PRIMARY TEXT: 10/12 Scala Pro. This measure determines the baseline grid.



Common typographic disorders	
Various forms of dysfunction appear among populations exposed	
to typography for long periods of time. Listed here are a number	
of frequently observed afflictions.	
or frequently exectived annotions.	
typophilia	
typophilia	
An excessive attachment to and fascination with the shape of	
letters, often to the exclusion of other interests and object choices.	
Typophiliacs usually die penniless and alone.	
typophobia	
The irrational dislike of letterforms, often marked by a preference for	
icons, dingbats, and - in fatal cases - bullets and daggers. The fears	
of the typophobe can often be quieted (but not cured) by steady	
doses of Helvetica and Times Roman.	
typochondria	
A persistent anxiety that one has selected the wrong typeface. This	
condition is often paired with okd (optical kerning disorder), the need	
to constantly adjust and readjust the spaces between letters.	
to constantly adjact and the start in	

Various forms of dysfunction appear among populations exposed to typography for long periods of time. Listed here are a number of frequently observed afflictions.Image: Constant of typography for long periods of time. Listed here are a number of frequently observed afflictions.typophiliatypophobiatypophobiaAn excessive attachment to and fascination with the shape of letters, often to the exclusion ofThe irrational dislike of letterforms, often marked by a preference for icons, dingbats, and—inA persistent anxiety that one has selected the wrong typeface. This condition is often paired with OKDother interests and object choices. Typophiliacs usually die penniless and alone.fatal cases—bullets typophobe can often be quieted (but not cured) by steady doses of Helvetica and Times Boman.(optical kerning disorder), the need to constantly adjust and readjust the spaces between letters.	ty	ommon pographic sorders			
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object choices. Typophiliacs usually die penniless and alone.and daggers. The fears of the typophobe can often be quieted (but not cured) by steady doses of Helveticadisorder), the need to constantly adjust and readjust the spaces between letters.	Al at fa st to	n excessive ttachment to and scination with the hape of letters, often the exclusion of	The irrational dislike of letterforms, often marked by a preference for icons, dingbats, and—in	A persistent anxiety that one has selected the wrong typeface. This condition is often paired with OKD	
	oł Ty di	bject choices. ypophiliacs usually ie penniless and	and daggers. The fears of the typophobe can often be quieted (but not cured) by steady	disorder), the need to constantly adjust and readjust the spaces	



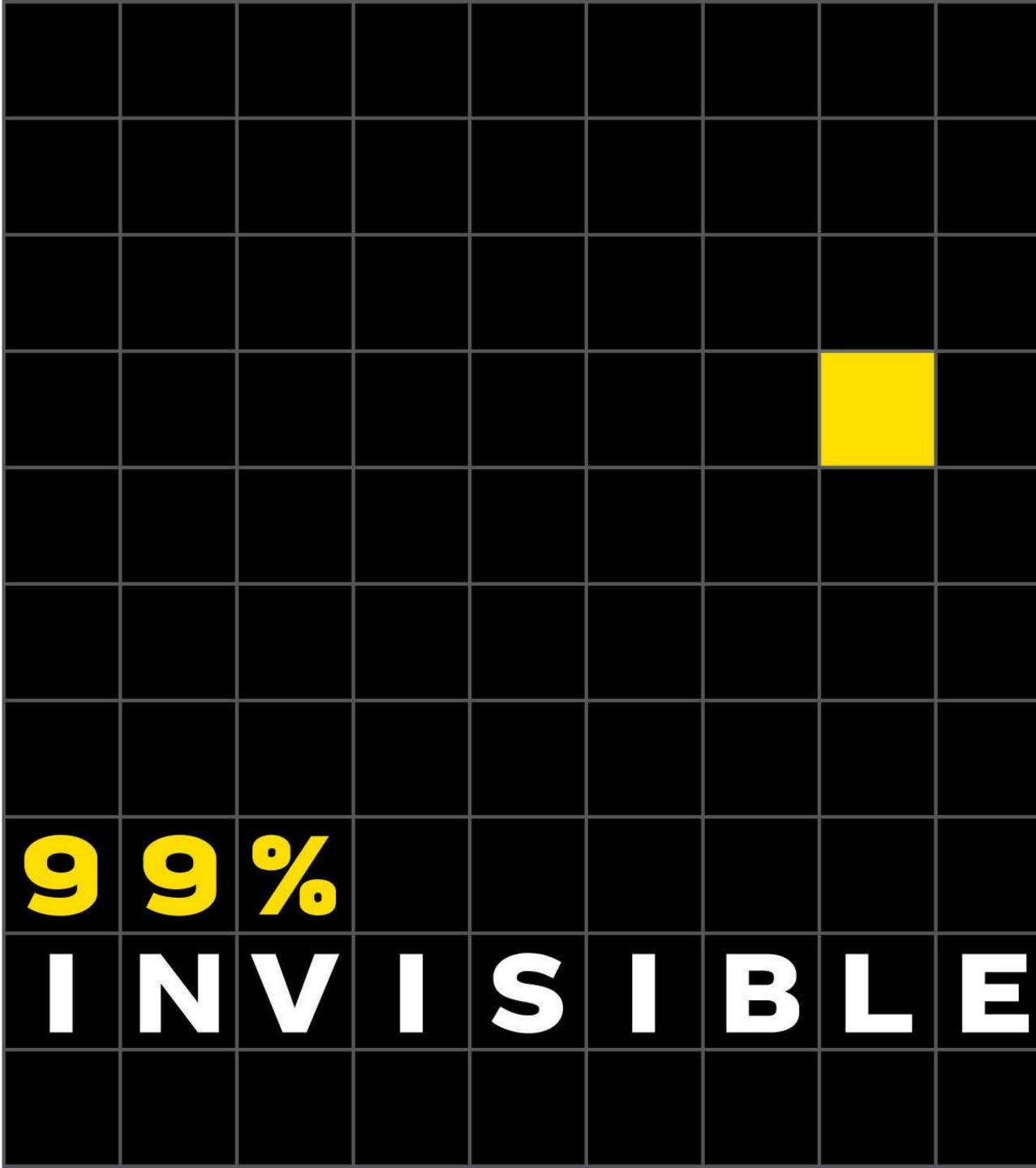
1		1	
Common			
typographic disorders			
disorders			
	typophilia	typophobia	typochondria
Various forms of	An excessive	The irrational dislike	A persistent anxiety
dysfunction appear	attachment to and fascination with the	of letterforms, often	that one has selected the wrong typeface.
among populations	shape of letters, often	marked by a preference for icons,	This condition is
exposed to typography for long	to the exclusion of	dingbats, and-	often paired with
periods of time.	other interests and	in fatal cases-bullets	OKD (optical kerning
Listed here are a	object choices.	and daggers.	disorder), the need
number of frequently	Typophiliacs usually	The fears of the	to constantly adjust
observed afflictions.	die penniless and	typophobe can often	and readjust the spaces between
	alone.	be quieted (but not cured) by steady	letters.
		doses of Helvetica	
		and Times Roman.	



Common typographic disorders	
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	typochondria A persistent anxiety that one has selected wrong typeface. This condition is often par with OKD (optical kerning disorder), the ne to constantly adjust and readjust the space between letters.



An excessive attachment to and fascination with the shape of letters, often to the exclusio of other interests and object choices. Typophiliacs usually die penniless and alone.	typophilia	Various forms of dysfunction appear among populations exposed to typography for long periods of time. Listed here are a number of frequently observed atflictions.
penniless and alone. Common typographic disorders	The irrational dislike of letterforms, often marked by a preference for icons, dingbats, and—in fatal cases—bullets and daggers. The fears of the typophobe can often be quieted (but not cured) by steady doses of Helvetica and Times Roman.	typophobia Image: selected the spaces   to constantly adjust and readjust the spaces Image: selected the spaces   to constantly adjust and readjust the spaces Image: selected the spaces



## 99percentinvisible.org



## WHITESPACE



Our little car isn't so much of a novelty ony more.

A couple of dozen college kids don't try to squeeze inside it.

The guy at the gas station doesn't ask where the gos goes.

Nobody even stores at our shape. In fact, some people who drive our little

flivver don't even think 32 miles to the golton is going any great guns. Or using five pints of oil instead of five quorfs.

Or never needing onti-freeze. Or rocking up 40,000 miles on a set of tires.

That's because once you get used to

### Think small.

some of our economies, you don't even think about them any more.

 $\sim$ 

W

Except when you squeeze into a small parking spot. Or renew your small insur-

once. Or pay a small repair bill, Or trade in your old VW for a new one. Think it over.

BASED ON THE CLASSIC NOVEL BY GRAHAM GREENE



STUDIO CANAL FEATUTRES BBC FILMS & UK FILM COUNCIL present a KUDOS PICTURES production a film by ROWAN JOFFE 'BRIGHTON ROCK' starring SAM RILEY ANDREA RISEBOROUGH ANDY SERKIS with JOHN HURT and HELEN MIRREN casting SHAHEEN BAIG hair and makeup designer IVANA PRIMORAC costume designer JULIAN DAY music supervisor IAN NEILmusic composed by MARTIN PHIPPS production designer JAMES MERIFIELD editor JOE WALKER director of photography JOHN MATHIESON co-producer PAUL RITCHIE executive producers JENNY BORGARS WILL CLARKE OLIVER COURSON RON HALPERN JAMIE LAURENSON based on the novel by GRAHAM GREENE produced by PAUL WEBSTER written & directed by ROWAN JOFFE







Ain Herrinfilm Homounfilm

### BACKGROUND NEW PREVENTION TECHNOLOGIES IN CONTEXT

The ensure a complete ensure approach to satisfy using TV, the international community has been capting for subspire towards aniversit access to prevention, care, reasoned access to prevention, care, reasoned or prevent support. This includes significantly improving access to existing proven means of prevent ing risk transmission. All the same time, the wants needs new prevention toos and technologies that will work with and completents existing prevention methods.

There are a number of global efforts underway to beneficipine to be technologies to prevent effor. Currently, there is research being conducted on expression ectors exceeded exc. vaccines, pre-exposure prophylicks (PVEP) and the use of nity herdment as preventors.

Research into NPTs is a lengthy process that takes 12 years or more to go train aboratory and animal testing, to satery and efficacy studies, and through regulatory approxisit and post-marketing studies.

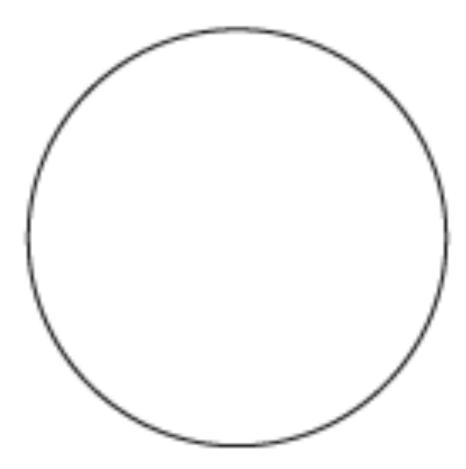
This facility provides a brain definition of each of the patential provenant body being researched, gives an premiere of the current state of research, and discusses their relevance for people living with HTV If their publicasi responses into prevention highronicipasi that how maximuccastats results-diagronigns and cervical barries. and frequencies for heroese simplex virus type 2 (452-2). Finally, the tasks provides of service of the prevention technologies that we summing have at our dispasse-leader and may specifical technologies (sametice) and protein expansive prophythese and prevention of service of moltaer respirations collect protein expansive prophythese and prevention of services of moltaer respirations collect protein expansive prophythese and prevention of services of moltaer respirations accord to and protein these features to accord to and about these features.

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## FANCY THING IS FANCY



913 beautiful. Don't you want it?

Squid dreamcatcher jean shorts, kelliyeh thundercats raw denim quinos 3 wolf moon cred gluten-free. Pitchfork cred photo booth Engerstache next level mumblecore Austin. Mikshk craft beer coeby sweater ethnic, whatever pickled mosweeney's squid kelfiyeh.

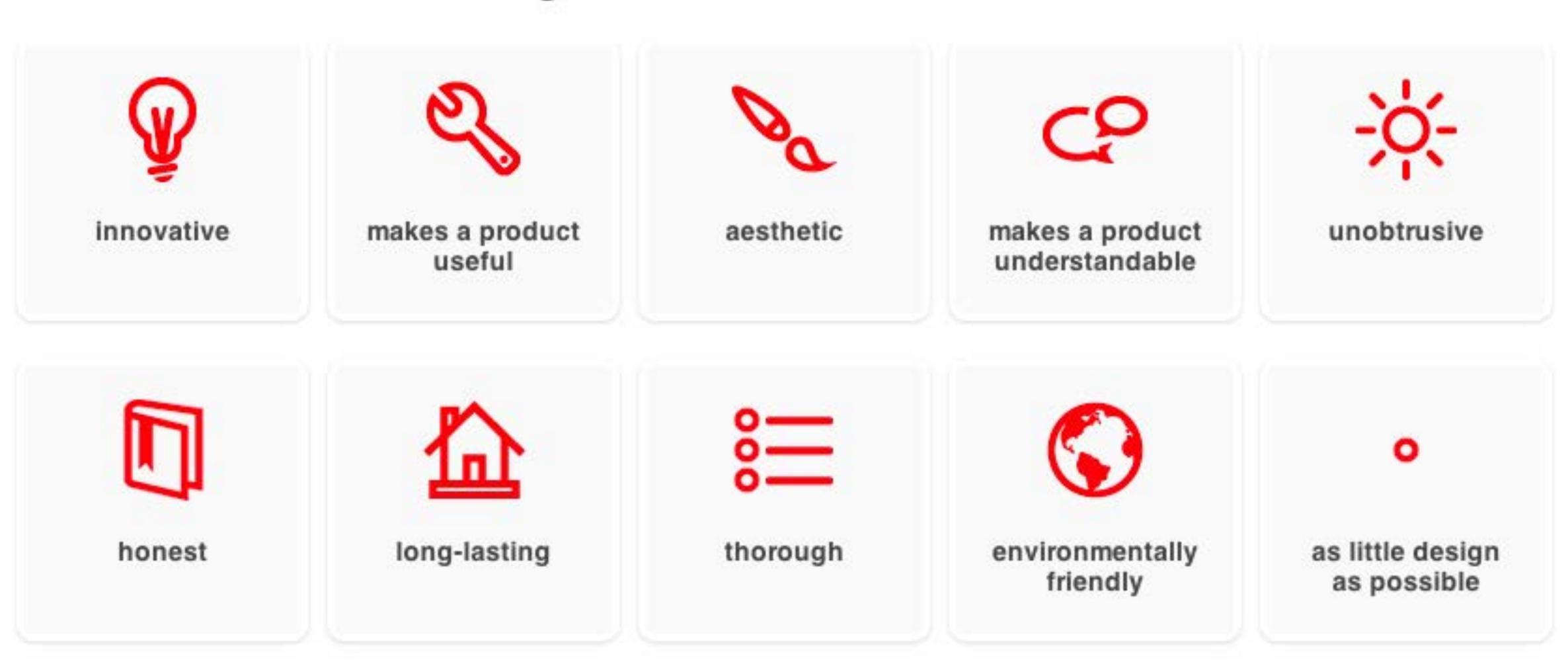




Watch the keynote 🕞

## iPad Air 2 Change is in the Air.

## Good design is...





TP 1 radio/phono combination, 1959, by **Dieter Rams** for Braun

## Good design is innovative

The possibilities for innovation are not, by any means, exhausted. Technological development is always offering new opportunities for innovative design. But innovative design always develops in tandem with innovative technology, and can never be an end in itself.





## **Good design** makes a product useful

A product is bought to be used. It has to satisfy certain criteria, not only functional, but also psychological and aesthetic. Good design emphasizes the usefulness of a product whilst disregarding anything that could possibly detract from it.



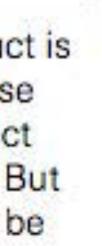




RT 20 tischsuper radio, 1961, by Dieter Rams for Braun

## Good design is aesthetic

The aesthetic quality of a product is integral to its usefulness because products we use every day affect our person and our well-being. But only well-executed objects can be beautiful.

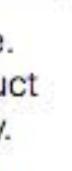




T 1000 world receiver, 1963, by Dieter Rams for Braun

## Good design makes a product understandable

It clarifies the product's structure. Better still, it can make the product talk. At best, it is self-explanatory.

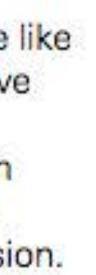




Cylindric T 2 lighter, 1968, by Dieter Rams for Braun

### **Good design is** unobtrusive

Products fulfilling a purpose are like tools. They are neither decorative objects nor works of art. Their design should therefore be both neutral and restrained, to leave room for the user's self-expression.

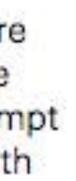




L 450 flat loudspeaker, TG 60 reel-toreel tape recorder and TS 45 control unit, 1962-64, by Dieter Rams for Braun

### **Good design is** honest

It does not make a product more innovative, powerful or valuable than it really is. It does not attempt to manipulate the consumer with promises that cannot be kept.

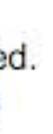




620 Chair Program, 1962, by **Dieter Rams** for Vitsce

## **Good design is** long-lasting

It avoids being fashionable and therefore never appears antiquated. Unlike fashionable design, it lasts many years - even in today's throwaway society.

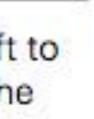




ET 66 calculator, 1987, by **Dietrich Lubs** for Braun

## Good design is thorough down to the last detail

Nothing must be arbitrary or left to chance. Care and accuracy in the design process show respect towards the user.



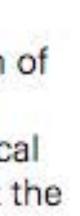
## **DIETER RAMS**



606 Universal Shelving System, 1960, by Dieter Rams for Vitsœ

### **Good design is** environmentallyfriendly

Design makes an important contribution to the preservation of the environment. It conserves resources and minimizes physical and visual pollution throughout the lifecycle of the product.



## **DIETER RAMS**



L 2 speaker, 1958, by Dieter Rams for Braun

### Good design is as little design as possible

Less, but better – because it concentrates on the essential aspects, and the products are not burdened with non-essentials.

Back to purity, back to simplicity.

## CS160 USER INTERFACE DESIGN

FALL 2020

UPLINK

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## **OUR COOL CLASS**

7 OCT 2020



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### **A SUB-TITLE**

## **A TOPIC FOR US TO DISCUSS** This is going to be good! There will be fun stuff! Maybe some surprises, too!

## CS160 USER INTERFACE DESIGN

## **CS160** USER INTERFACE DESIGN

ACUMIN PRO REGULAR ACUMIN PRO MEDIUM ACUMIN PRO LIGHT ACUMIN PRO EXTRA LIGHT ACUMIN PRO ITALIC **ACUMIN PRO BLACK ACUMIN PRO THIN** 

#### **VIOLET S. MANGANESE**

#### Education

#### **UCLA Anderson School of Management** August 2011 to June 2013

- Cumulative GPA: 3.98
- ✤ Academic interests: real-estate financing, corporations, money
- Henry Murtaugh Award

#### Hartford University

#### September 2003 to June 2007

- B.A. summa cum laude, Economics
- Extensive coursework in Astrophysics, Statistics
- Van Damme Scholarship

#### **Business experience**

#### Boxer Bedley & Ball Capital Advisors June 2008 to August 2011

Equity Analyst

- Performed independent research on numerous American industries, including:
- Steelmaking, croquet, semiotics, and butterscotch manufacturing
- Led company in equities analyzed in two quarters

#### **Other work experience**

#### **Proximate Cause**

June 2007 to May 2008

- Assistant to the Director
- Helped devise fundraising campaigns for this innovative nonprofit
- Handled lunch orders and general errands

#### Hot Topic

February 2004 to March 2006 Retail sales associate

- Inventory management
- Training and recruiting

#### **Skills and interests**

- Fluent in Mandarin, Esperanto; conversational knowledge of Gaelic
- Writer of U.S. Senate-themed fan fiction
- Ocean kayaking and free diving
- Travel, cooking, hiking, playing with my dog
- Ceramics
- Backgammon
- Making paper planes

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Los Angeles, California

Cambridge, Massachusetts

Los Angeles, California

New York, New York

Boston, Massachusetts

#### TRIXIE B. ARGON

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#### Hot Topic

#### Retail-sales associate

- Top in-store sales associate in seven out of eight quarters
- Inventory management
- Training and recruiting

#### 5419 HOLLYWOOD BLVD STE C731, LOS ANGELES CA 90027

(323) 555 1435 TRIXIEARGON @ GMAIL.COM

2011–13 Academic interests: real-estate financing, criminal procedure, corporations 2003-07

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Los Angeles, California

Boston, Massachusetts

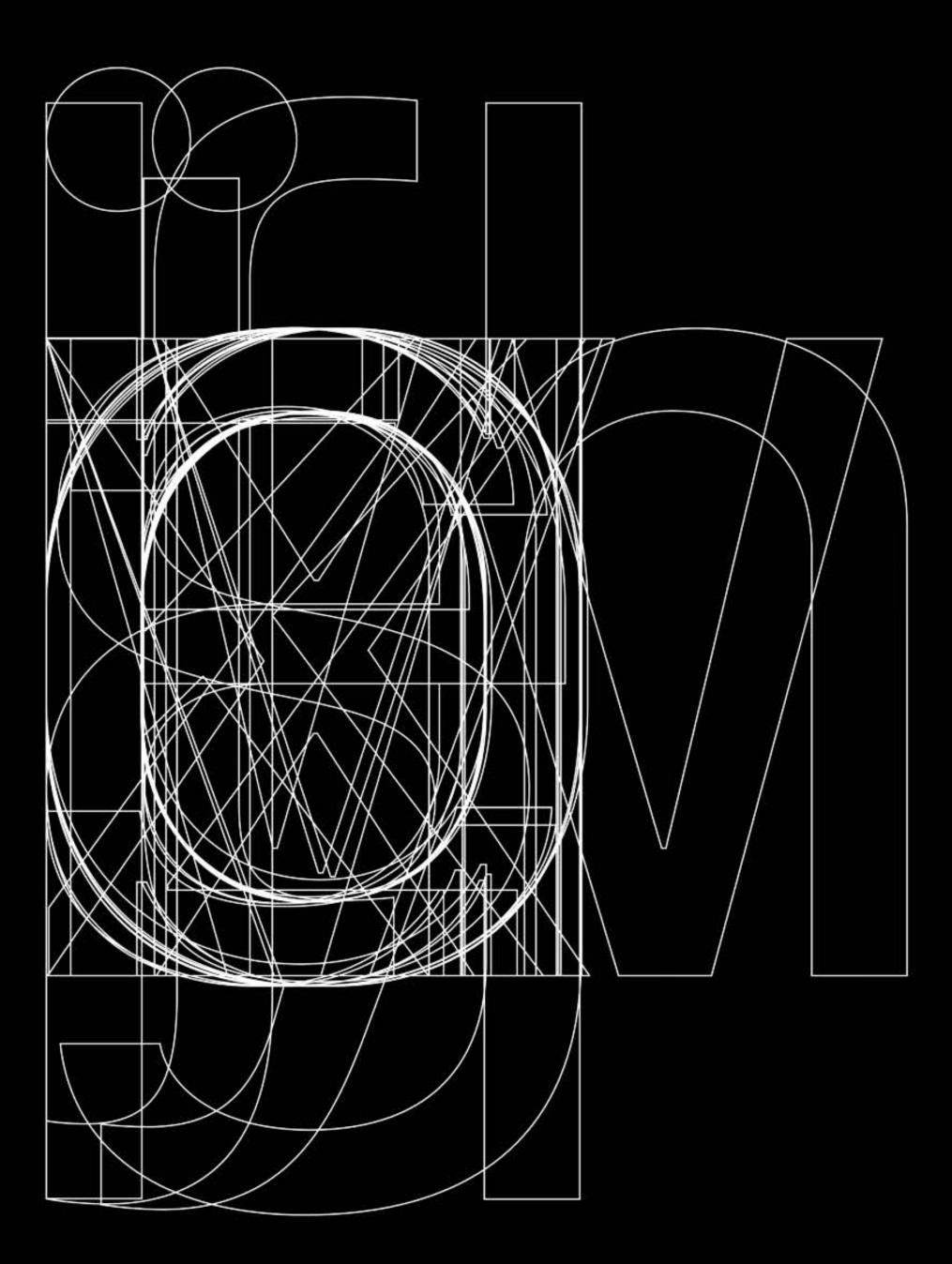
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San Francisco



## MON 10°09

LON

5:09

12:00—1:30рм Lunch with Ken Tartine Bakery

72°

#### 11:30AM-12:30PM Type Discussion ID Studio

#### Timer

#### 14:59

CAL 350/600 MIN 14/30 HOUR 6/12

16,335.28

London 6:09рм Today +8 hours

Sunset 7:51PM 9HRS 42MINS Cupertino, CA

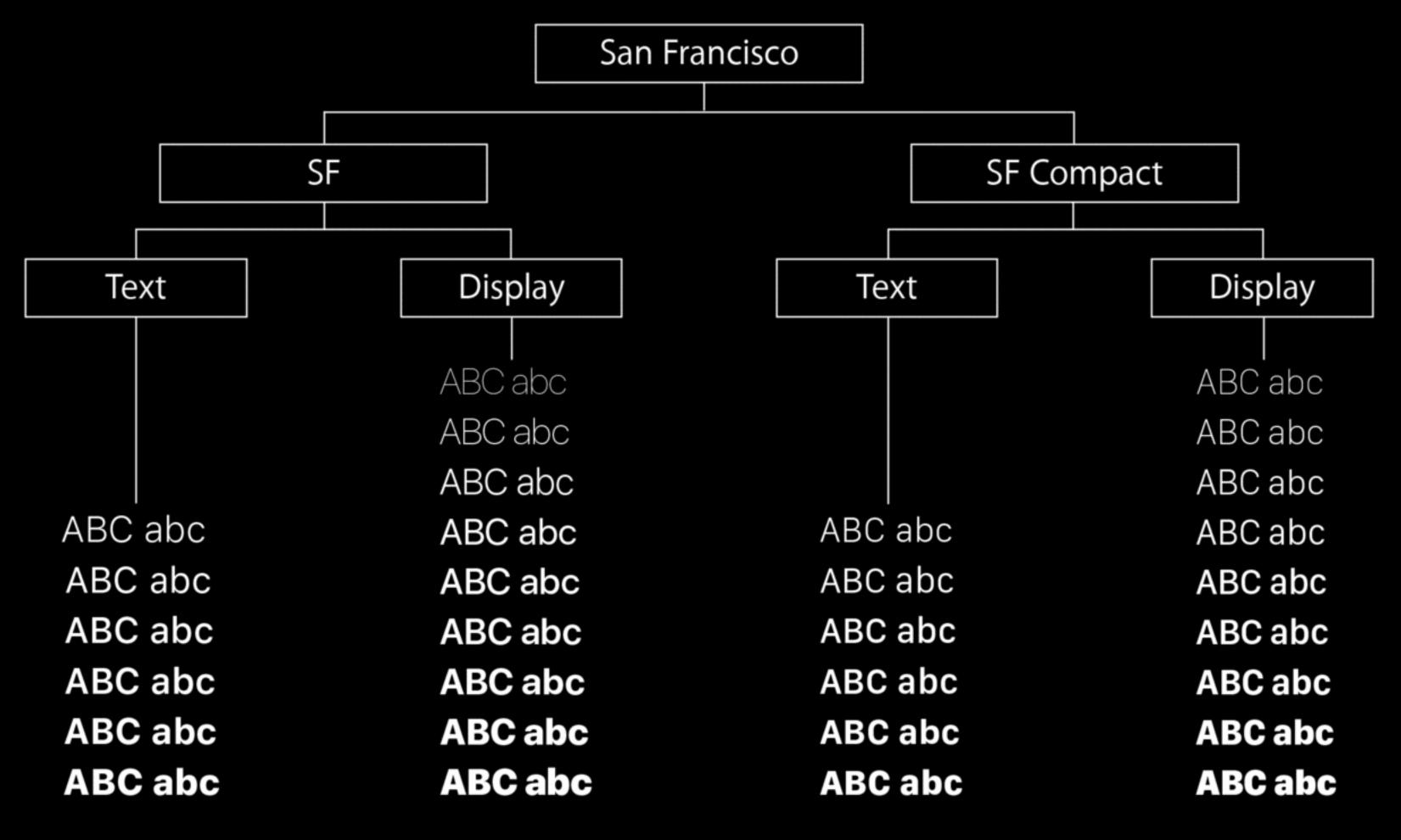


Cupertino 72° Partly Cloudy H: 72° L: 45°

Waning Crescent Moonrise 5:15PM 7HRS 6MINS



## Family Tree



## SAN FRANCISCO TYPEFACE A neo-grotesque sans-serif typeface made for Apple Watch A modern font that changes typefaces dynamically according to context

## ABCDEFGHIJKLM NOPQRSTUVWXYZ abcdefghijklm nopqrstuvwxyz 1234567890

San Francisco

ABCDEFGHIJKLM NOPQRSTUVWXYZ abcdefghijklm nopqrstuvwxyz 1234567890

Neue Helvetica

## **SAN FRANCISCO – LEGIBILITY** Bigger lower case letters (bigger x-height) Upper case are shorter and numbers align with them.



## **SAN FRANCISCO – MORE OPEN LETTERFORMS**

- The "e" and "c" have wider apertures (the open spaces that prevent them from being complete circles). Besides making the font look more "friendly," these also help it more legible on-screen.
- The terminal on the top of the "f" is slightly more open, as is the terminal on the tail of the "y."
- The tail of the "t" is more open, and bends less abruptly.

## Helvetica Neue (Medium)

## San Francisco (Text Medium)



## **SAN FRANCISCO – LESS-SOPHISTICATED MODELING**

- The leg of the "R" is a more simple stroke. Straight, instead of undulating.
- The bowl of the "a" attaches to the stem more abruptly, reminiscent of a more humanist sans-serif, such as Lucida Grande.
- The apostrophe (and quotation mark) is less contrived. It's more like a hand-drawn apostrophe, and reads better on tiny screens.

# 

Helvetica Neue (Medium)

# 

San Francisco (Text Medium)





## SAN FRANCISCO – BETTER NUMBER HANDLING

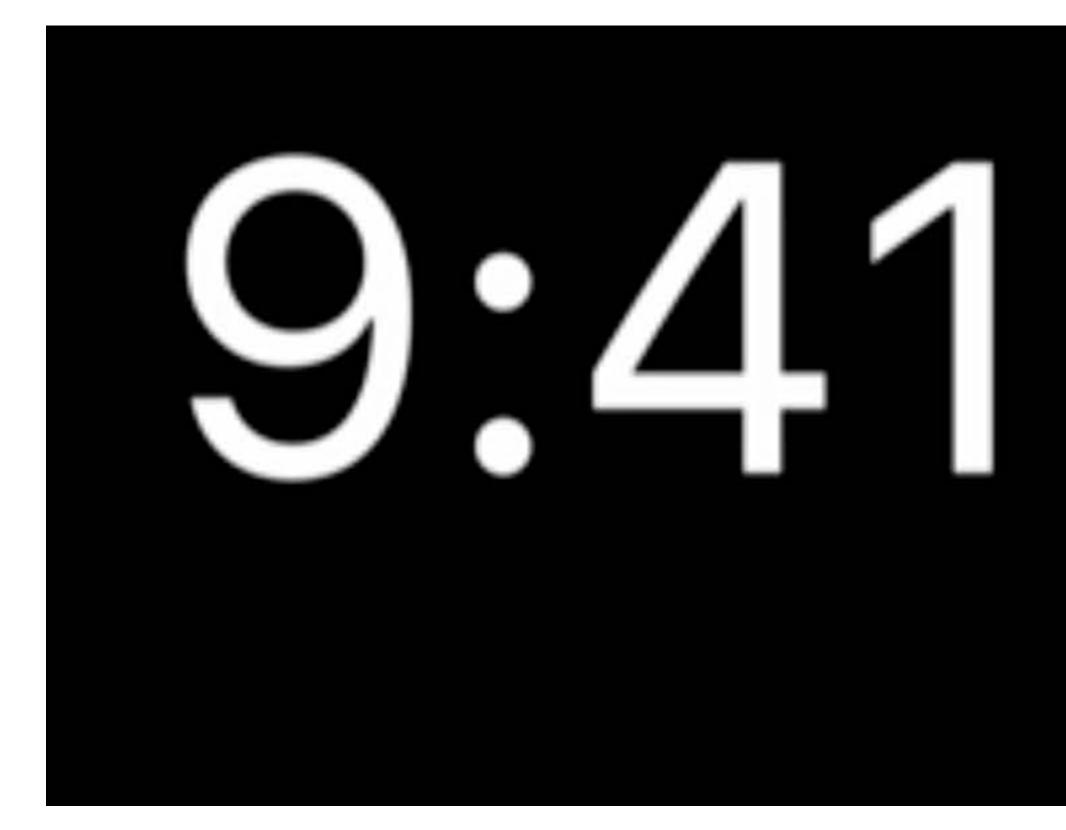
Proportionally-spaced numerals look better spaced numerals cause a distracting shimmy

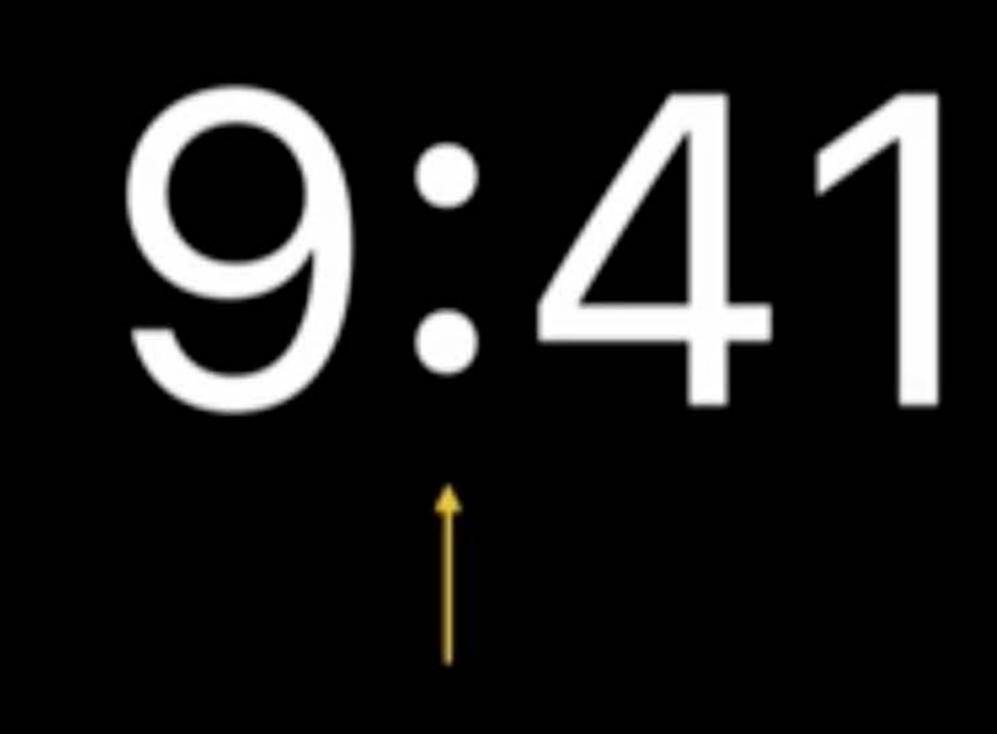
# 0.87MB of 10MB (13KB/sec) 0.17MB of 10MB (13KB/sec)

- You don't have awkward spacing in pairings that include thin numbers
- But not ideal for situations like the one below, where the proportionally-



## SAN FRANCISCO – COLON Vertically-centered colon







## **SAN FRANCISCO – LESS NUMBER CONFUSION**







