

Book Publication, Format and Grids



Josiah Mariyah Qiwen

Content

What is a book?

Anatomy of a book, page and grid

A book designer's palette

Format of a book

The Grid System

Layouts

What is a book?

Word derived from the Old English word 'bok' which means 'beech tree'.

Oldest form of documentation.

Stores the world's knowledge, ideas and beliefs.

Book :

“A portable container consisting of a series of printed and bound pages that preserves, announces, expounds and transmits knowledge to a literate readership across time and space.”

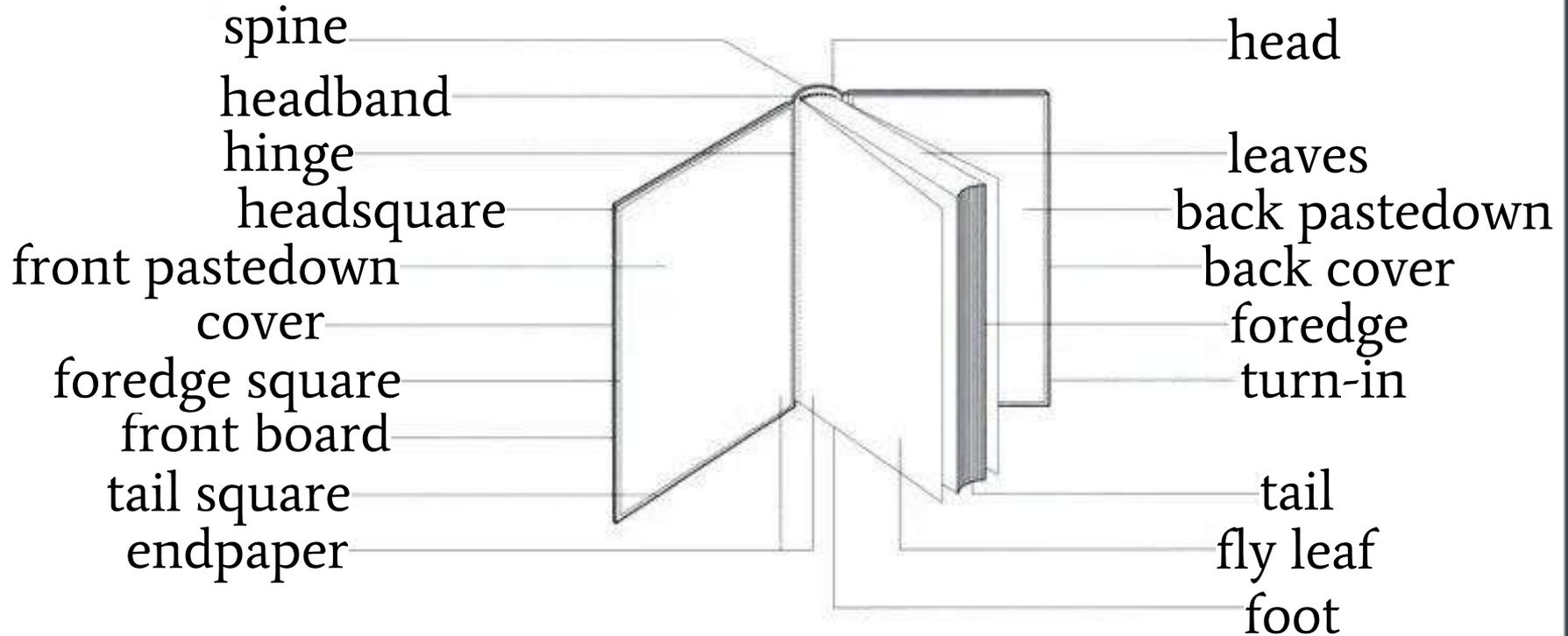
Andrew Haslam

The power of print: the influence of books

Able to disseminate ideas that have changed the course of intellectual, cultural and economic development.



Anatomy of a book



Anatomy of a page

Portrait & landscape

Page height and width size

Verso & recto

Single page

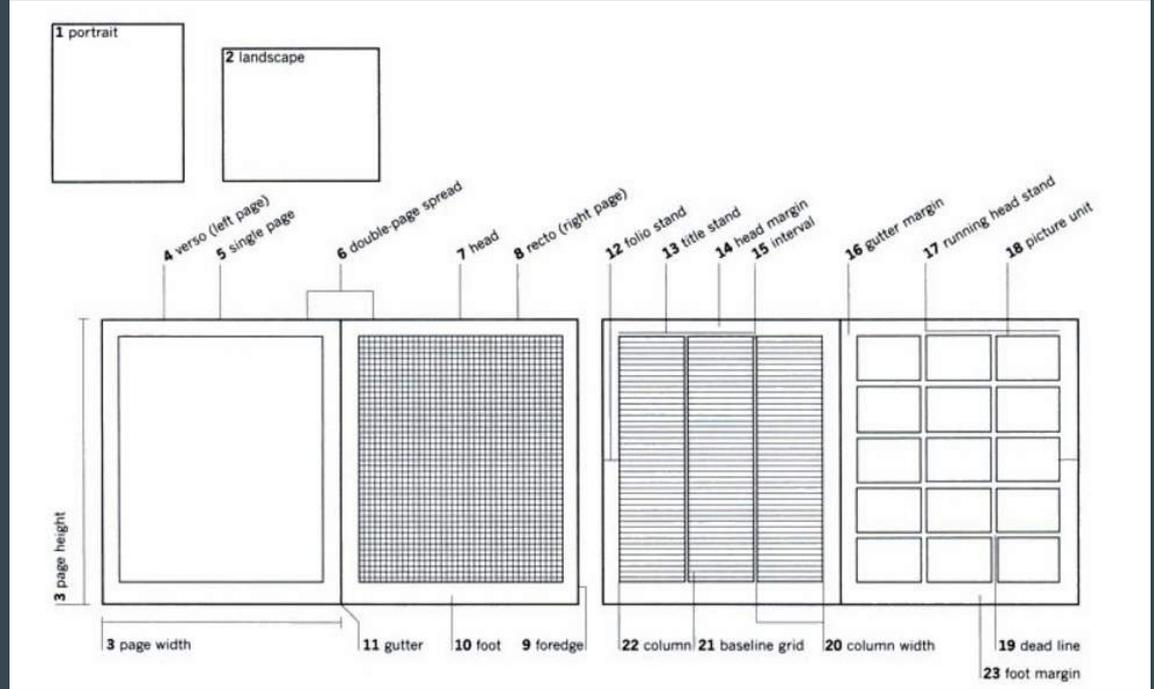
Double-page spread

Head top of the book

Foredge

Foot bottom of the book

Gutter



Anatomy of a grid

Folio stand line

Title stand line

Head margin

Internal column

Gutter margin

Running head stand line

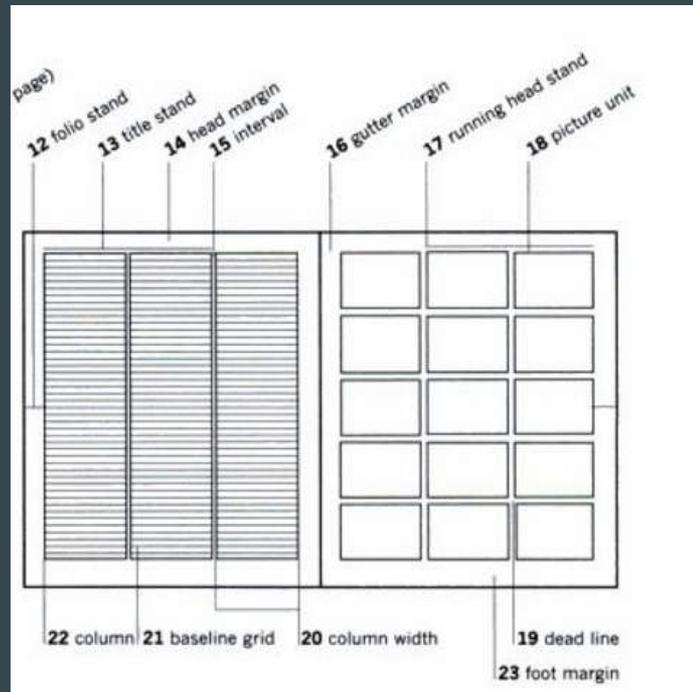
Picture unit

Column width/measure

Dead line

Baseline

Column



Models of book creation

Writer - publisher - editor - designer - production - printer - distribution - retail

Publisher - writer - editor - designer - production - printer - distribution - retail

Editor - publisher - writer - designer - production - printer - distribution - retail

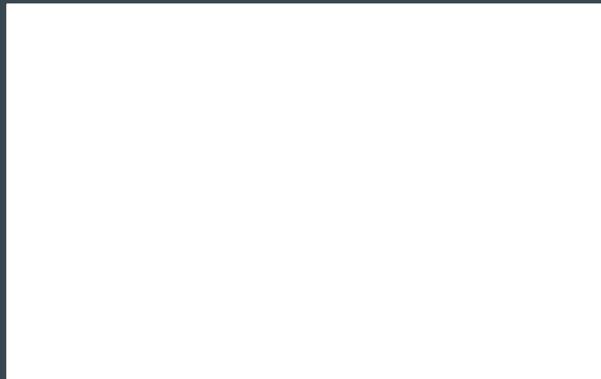
Designer

Photographer - writer - publisher - editor - production - printer - distribution - retail

Illustrator

The book designer's palette

Format



Landscape

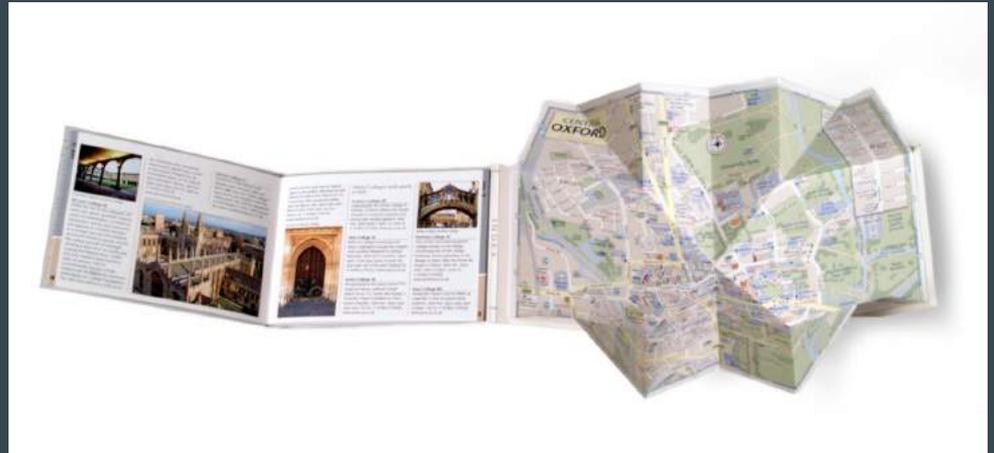
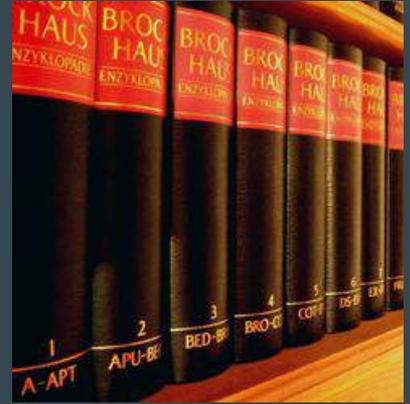
Square

Portrait

Format

Consider size to fit content

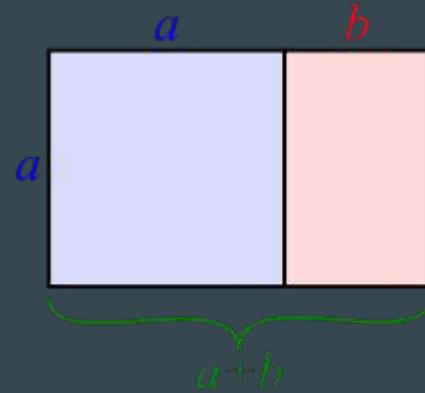
In practical terms, choosing the format of a book determines shape of the container that holds the author's ideas.



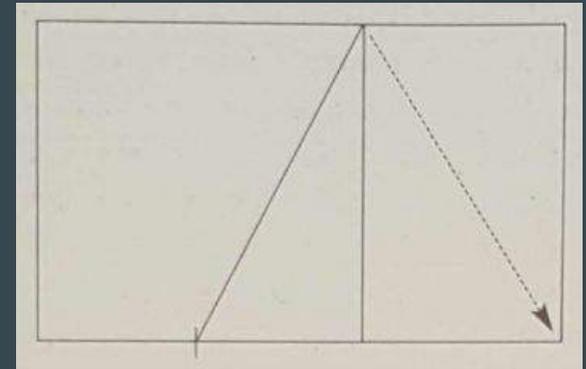
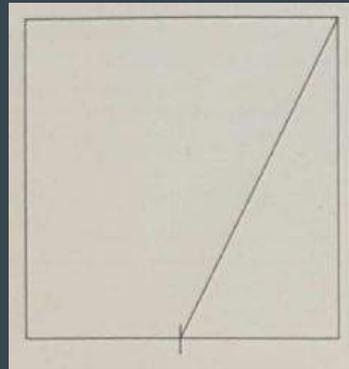
Golden Section

Rectangle is divided in a way that the relationship between the smaller and the larger is the same as that between the larger and the whole.

$$a:b = B(a+b)$$



1. A square will be divided in half;
2. The diagonal of the half square will be rotated to horizontal.

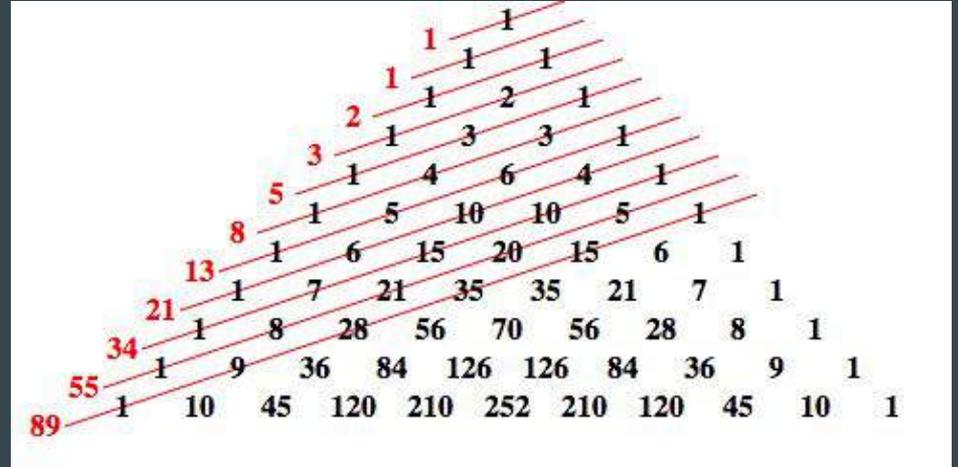


Fibonacci Series

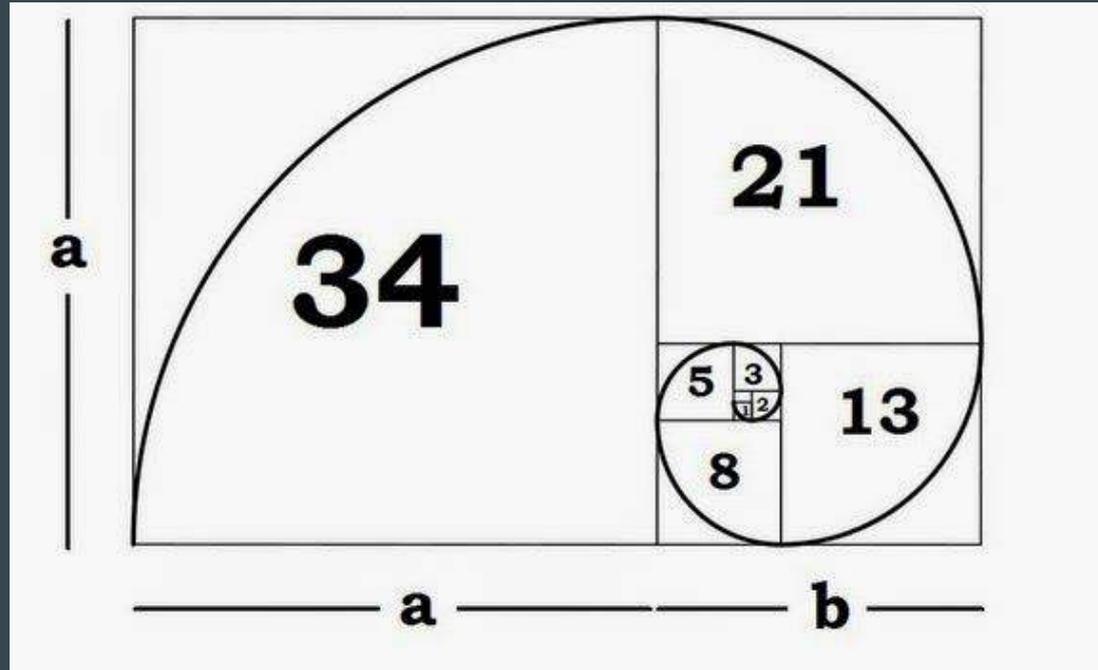
The consistent relationship between square and rectangle creates a logarithmic spiral sequence.

Each square relates to the next as part of the Fibonacci series.

The adding together of two successive figures will create golden sections infinitely.



Derived from Golden Section & Fibonacci Series



Bringhurst's Chromatic Scale

Robett Bringhurst compares the proportion of the page to the chromatic scale of Western music.

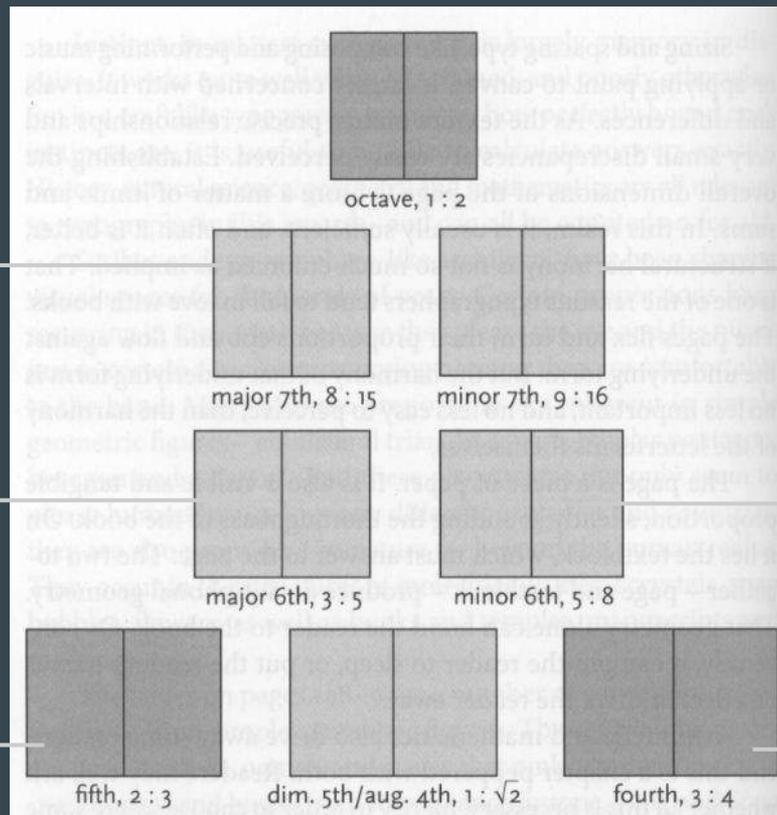
Both page proportion and the chromatic scale are defined by numeric intervals.

In music terms, alternating proportions form harmonic inversions.

E.g. the harmonic inversion of a minor sixth is a major third.

Total of each such pair of intervals is always one octave (1:2).

Chromatic Scale of Page Proportions



Renaissance

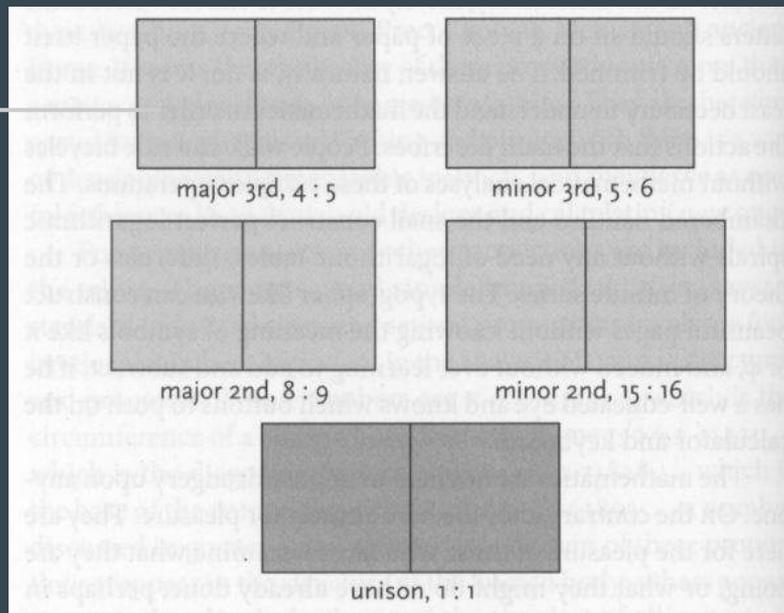
Renaissance

European Middle
Age till Today

European Middle
Age till Today

Folding minor 6th
into half = major 3rd

From 5:8 to 4:5



MODULOR

COUDÉE

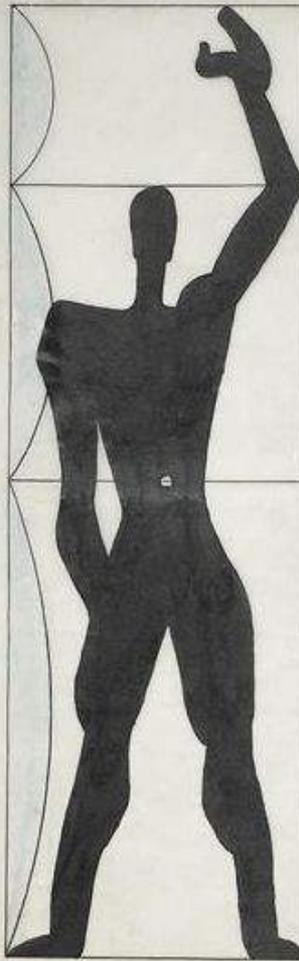
PIED

DEMI-COUDÉE
OU EMPAN

PALME

2260

228 75



1830

1150

5

7

10

30

28

9

26

4

6

8

24

22

7

20

3

6

18

4

16

5

14

2

3

4

12

10

3

8

1

2

6

1

4

1

2

Rational and Irrational Rectangles

Classical proportions are derived from geometrical rather than arithmetical relationships.

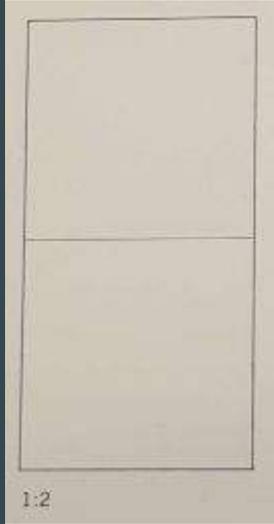
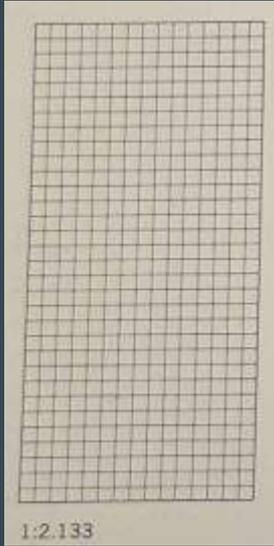
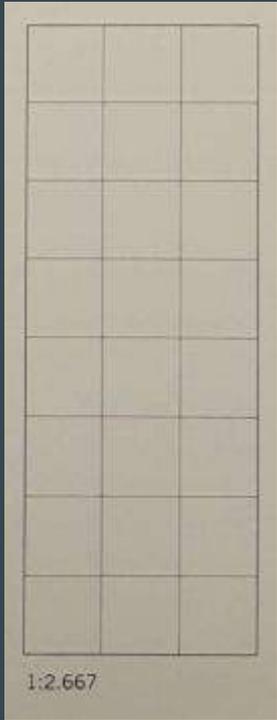
Rational rectangles

- Can be subdivided by squares
- Have arithmetical basis
- E.g. formats 1:2, 2:3, 3:4, etc

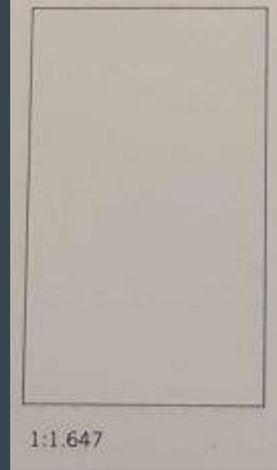
Irrational rectangles

- Can be subdivided into rectangular units
- Derived from a geometrical basis
- E.g. Golden section

Rational Rectangles



Irrational Rectangles

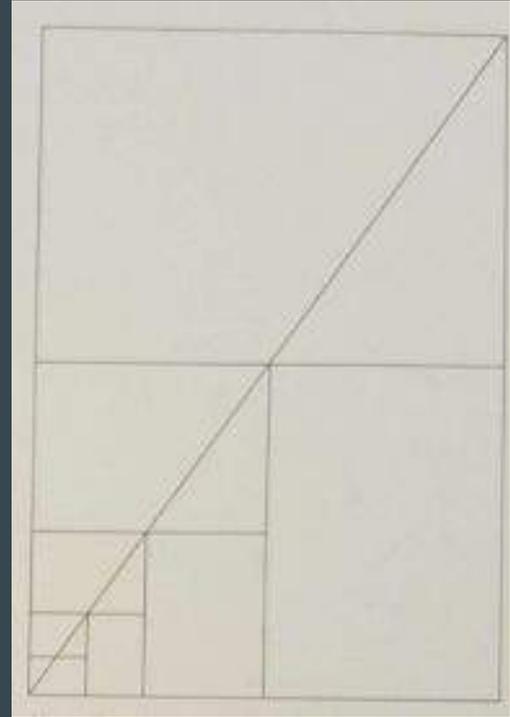


Paper Sizes: Imperial and A Sizes

Make use of a simple division of an existing paper size.

Extremely economical as wastage is kept to a minimum.

E.g. A sizes have fixed proportion; every size is half of another.



Formats Determined by the Internal Elements of the Page

Designer may have established a working format before deciding on the exact height and width of the page.

Working format and size are often refined in the process of constructing grid.

Some are unconcerned by a mismatch baseline grid and format.

Selecting font family

Using the Fibonacci Series

1 4 7 11 18 29 47

Major headings at 47 pt

Subheadings at 29 pt

Body text at 18 pt

Footnotes at 11 pt

Using the Fibonacci Series (+ half-scale)

3 3.5 4 5.5 7 9 11 14.5 18 23.5 29 38 47

Major headings at 47 pt

Subheadings at 38 pt

Body text at 29 pt

Footnotes at 18 pt

Using the Fibonacci Series (+ half & quarter-scale)

3 3.25 3.5 3.75 4 4.75 5.5 6.25 7 8 9 10 10.5 10.75 11 12.75 14.5 16.25 18 20.75 23.5 26.25 29
33.5 38 42.5 47

Major headings at 47 pt

Subheadings at 38 pt

Body text at 26.25 pt

Footnotes at 16 pt

Considerations to Selecting Font Family

Type size

Type weight

Variety of FONT

Colour, Contrast and Hierarchy

Colour - ink color, tonal values of typeface, text often referred to by printers as 'greymatter'.

The tonal values are determined by proportion and line weight.

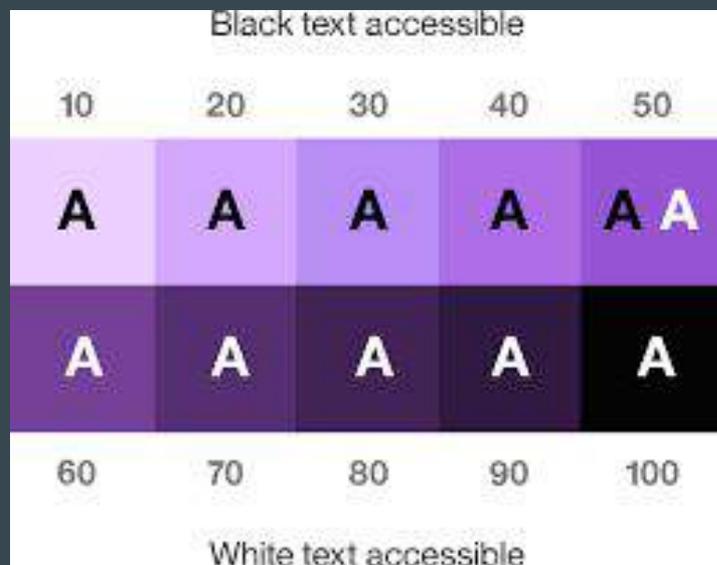
Darker text blocks are brought forward; lighter text blocks recede.

The tonal values separate the elements.

- E.g. Main heading being slightly darker than body text

**LOOK
HERE!**

look here!



Typeface

Influences content, origin, period, historical precedence, readership, multilingual publishing, practical issues of legibility, range of weights or small caps of fractions available in font, and production values

Type of Nation

- When books were written, printed and published in a single country. Typefaces become emblematic of nation. Sense of nationalism.
- French type for French writers

Type as Ambassador of Culture

- Re-examined historical patterns from which to devise new forms.

Type as Historical Plunder

- William Morris's revival of medieval letter forms
- Born of an appreciation of early craft and political ideology

Type for Today

- Some feel type is a product of the age and should reflect the new

Type as Internation

- Embrace the new geometric form that reflect the spirit of the machine age
- Ideas of internationalism led to the development of fonts that sought a kind of visual neutrality, a typographic transparency

What is a grid?

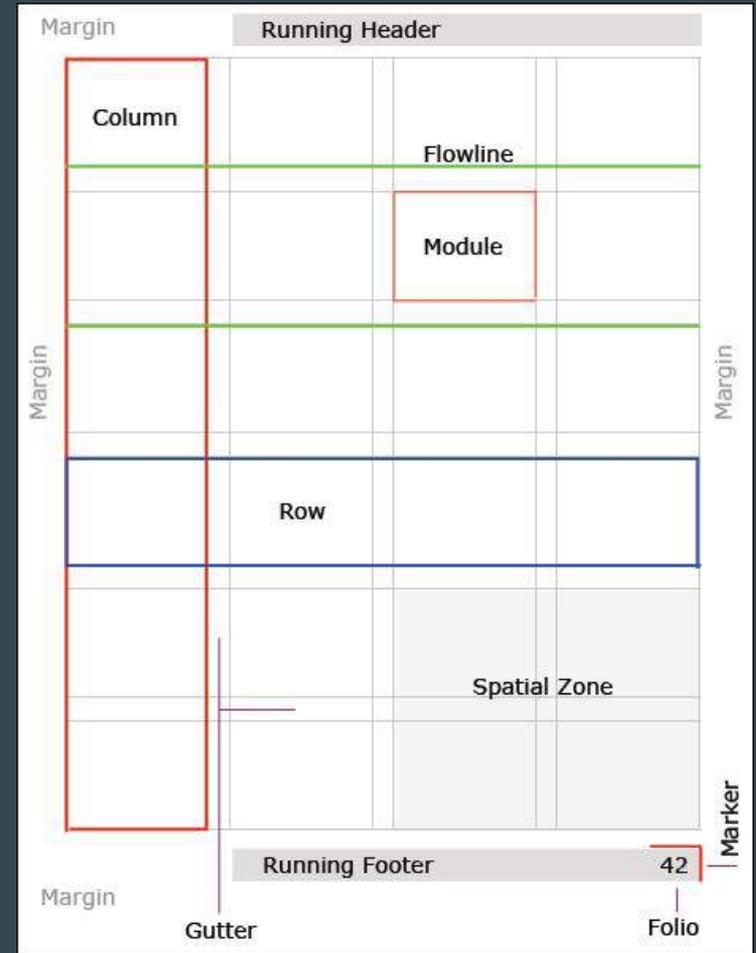
The Grid System

Way of organising content

Precision, order and clarity

Or;

Aesthetic oppression

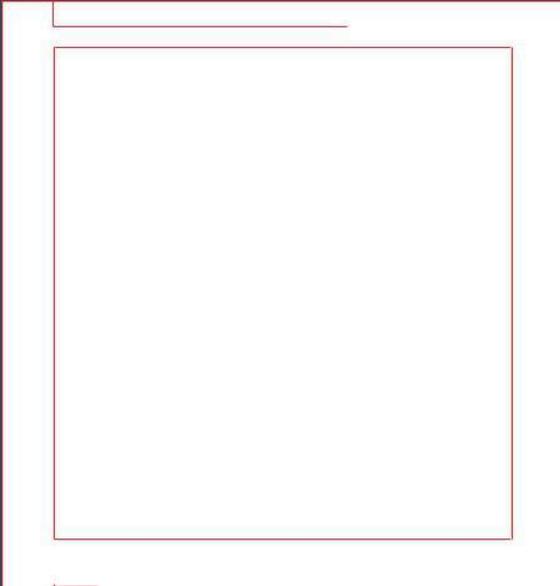


The Grid System – Following the rules

Consider: Multiple kinds of information
Number of images
Cropping of images

Problems: Unusually long headlines
Dead spots left

Which type of basic structure will accommodate the project's needs?



Manuscript Grid

Primary structure Text block and margins define position on a page

Secondary structure Location and size relationship of elements of the page

The Form of the Paragraph

Even after the appearance of the indent, the capitulum remained in use for identifying sections and chapters along with other marks like the section, the dagger, the double dagger, the asterisk, and numerous less conventional ornaments. Such marks have been used since the middle ages for citing passages and citing marginal references. The invention of printing made more elaborate and precise referencing possible because the prints of a text were consistent from one copy to the next. All punctuation was used idiosyncratically until after the invention of printing, which revolutionized writing by disseminating grammatical and typographical standards. Before printing, punctuation varied widely from region to region and scribe to scribe. The Librarian at Alexandria who was named Aristophanes designed a Greek punctuation system circa 200 BC. His system marked the longest segments of discourse with a centered dot, called a comma, and marked the longer sections with a low dot, called a colon. A high dot set off the longest unit. He called it period. The three dots were easily distinguished from one another because all the letters were the same height, providing a consistent frame of reference, like a musical staff.

Although the terms comma, colon, and period persist, the shape of the marks and their function today are different. During the seventh and eighth centuries new marks appeared in some manuscripts, including the semicolon, the inverted semicolon, and a question mark that ran horizontally. A thin diagonal slash, called a virgula, was sometimes used like a comma in medieval manuscripts and early printed books. Such marks are thought to have been cues for reading aloud. They indicated a rising, falling, or level tone of voice. The use of punctuation by scribes and their interpretation by readers was by no means consistent, however, and many might be added to a manuscript by another scribe well after it was written.

Early punctuation was linked to oral delivery. For example the terms comma, colon, and period, as they were used by Aristophanes, come from the theory of melody, where they refer to musical units of speech. As a source of rhetorical rather than grammatical cues, punctuation served to regulate pace and give emphasis to particular phrases, rather than to mark the logical structure of sentences. Many of the pauses in rhetorical delivery, however, naturally correspond with grammatical structure, for example, when a pause falls between two clauses or sentences.

The system of Aristophanes was rarely used by the Greeks, but it was revived by the Latin grammarian Donatus in the fourth century AD. According to Donatus, punctuation should fall whenever the speaker would need a moment's rest; it provided breathing cues for reading aloud. Some later writers modified the theories of Donatus, returning to a rhetorical approach to punctuation, in which the marks served to control rhythm and emphasis. After the invention of printing, grammarians began to base punctuation on structure rather than on spoken sound; marks such as the comma, the colon, and the period signified some of the grammatical parts of a sentence. Thus punctuation came to be defined architecturally rather than orally. The comma became a mark of separation; the semicolon worked as a joint between independent clauses. The colon indicated grammatical discontinuity. Writing was slowly distanced from speech.

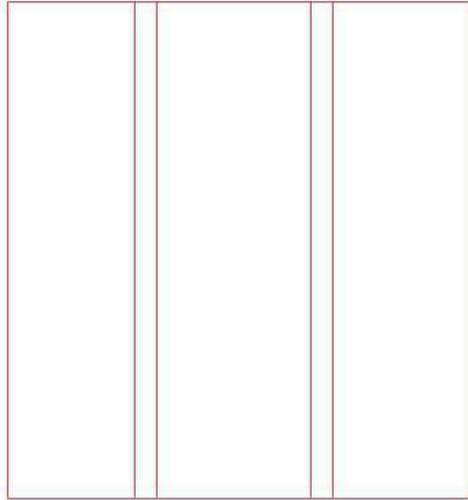
Rhetoric, structure, and pace are all at work in modern English punctuation, whose rules were established by the end of the eighteenth century. Although structure is the strongest rationale today, punctuation remains a largely intuitive art. A writer can often choose among several correct ways to punctuate a passage, each with a slightly different rhythm and meaning. There was no consistent mark for quotations before the seventeenth century. Direct speech was usually announced only by phrases like "he said". Sometimes a double comma was used in manuscripts to point out important sentences and was later used to enclose quotations. English printers before the nineteenth century often edged one margin of a quote with double commas. This convention persisted as a spatial plane rather than a temporal line, framing the quoted passage like a picture. Printing, by producing identical copies of a text, encouraged the standardization of quotation marks. Printed books commonly incorporated material from other sources.

Classical Type

Both the Greek and Roman alphabets were originally minuscule: all the letters were the same height. Greek and Roman minuscule letters developed out of rapidly written scripts called cursive, which were used for business correspondence. Minuscule characters have tops extending above and below a uniform body. Alcuin, advisor to Charlemagne, introduced the "Carolingian" minuscule, which spread rapidly through Europe between the eighth and twelfth centuries. During the dissemination of Carolingian script, condensed, black minuscule styles of handwriting, now called "gothic", were also developing. The

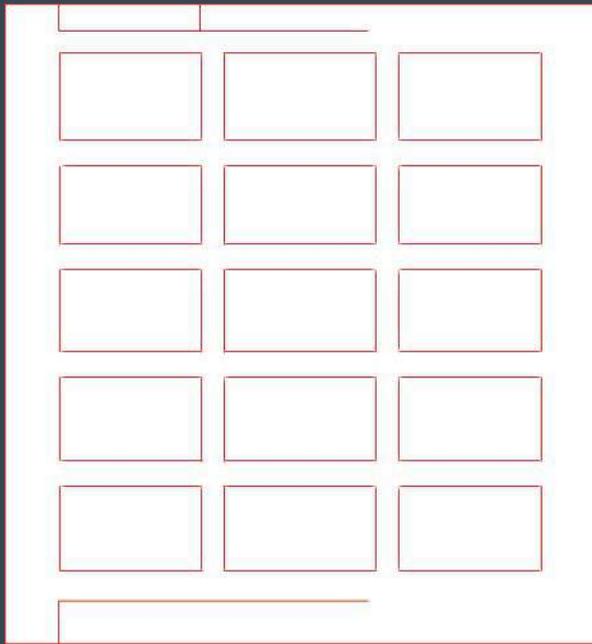
Good for discontinuous information

Goal: Find column width that accommodates a comfortable number of characters in one line of type at a given size



	Grid systems	Grid systems	
 <p>The typographic grid is a proportional template for composition, tables, pictures, etc. It is a formal programme to accommodate a columnar text.</p>	<p>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 grid (graphical user interface) creates a girdled space in which windows jostle windows. In addition to their place in the background of design production, grids have become explicit theoretical tools. Avant-garde designers in the 1950s and 1960s exposed the mechanical grid of letterpress, bringing it to the potential surface of the page. In Switzerland after World War II, graphic designers built a total</p>	<p>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</p> 	<p>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</p> <p>The typographic grid is a proportional template for composition, tables, pictures, etc. It is a formal programme to accommodate a columnar text.</p>

Column Grid



Column grid with flowlines

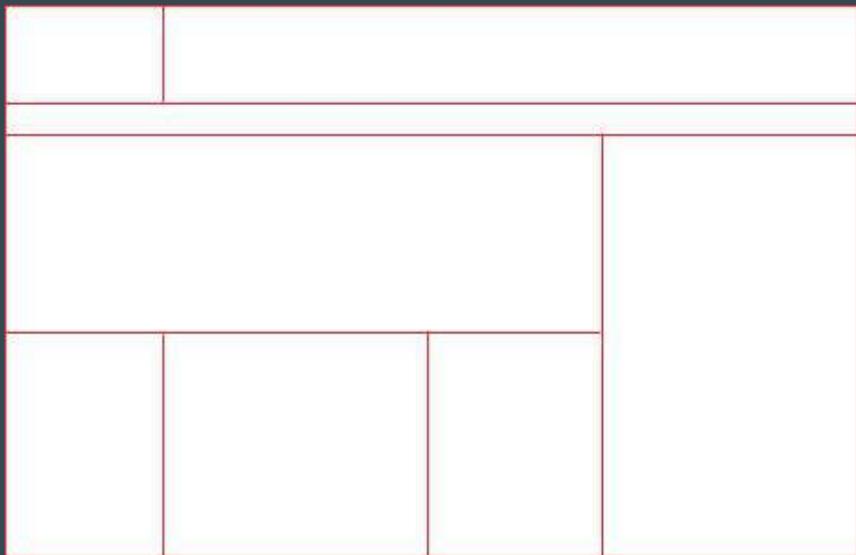
Conceptual, aesthetic image

Ideal social and political order

Clarity and thoughtfulness

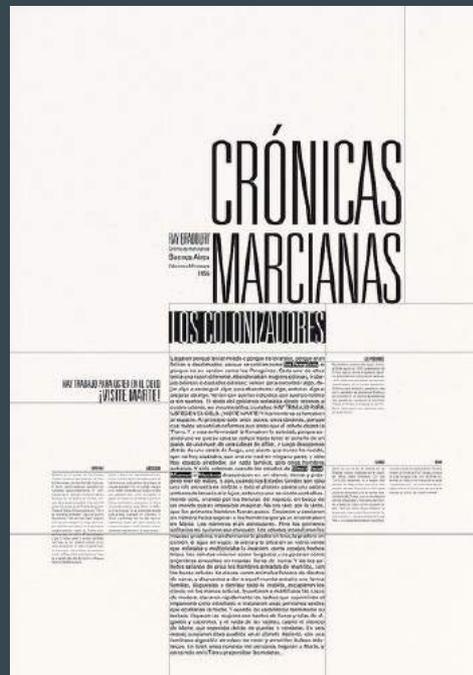
Modular Grid

Common typographic disorders				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.				Various forms of dysfunction appear among populations exposed to typography for long periods of time. Listed here are a number of frequently observed afflictions.	hypophilia 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.		
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					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.		



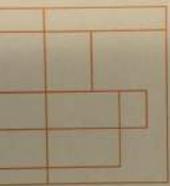
Vary in:
Column widths
Intervals between column widths

Hierarchical Grid



Do I always need to follow the grid?

Spontaneous column-grid deconstruction



Spontaneous
hierarchical grid
deconstruction



structure
**Diagram, collage, and
compound column-grid
deconstructions**

exhibit comparisons

04	12	13
18	19	21
20		
04	06	14
23	28	29
30		



structure
**Modular grid
deconstruction**



structure
**Relational-scale
information
architecture**



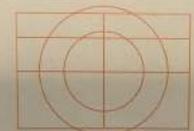
Collage and filmic
column grid
deconstruction



structure
**Architectonic
column grid
deconstruction**



structure
**Nonorthogonal
grid deconstruction**



structure
**Spontaneous
architectonic
composition**

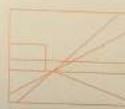
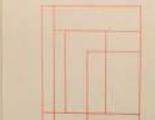


exhibit comparisons
32

structure
**Geometric picto
allusion**



structure
**Architectonic grid
deconstructed into
multiple layers**

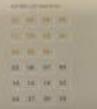


structure
**Spontaneous
geometric
composition**



210

structure
**System of hierarchical
compositions with
collage and derivative
modular grids**



structure
**grid
deconstruction**

structure
**Hierarchical grid
deconstruction and
decorative grid**

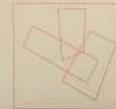


structure
**Spontaneous
architectonic
composition**



230

structure
**Systematic collage
column grid
deconstruction**



225

structure
**Spontaneous
geometric
composition**

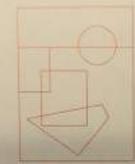


exhibit comparisons
02 06 12 19

21 31
03 08 07 13
24 27 30



structure
**Pictorial
manuscript grid
deconstruction**



exhibit comparisons

06	16	18	17
26	29	31	
04	07	08	12
30	23	31	32

exhibit comparisons

03	06	09	11
25	28	30	32
34			
10	30	35	

exhibit comparisons

03	10	12	24
25	28	33	34
05	13		

structure
**Pictorial
manuscript grid
deconstruction**



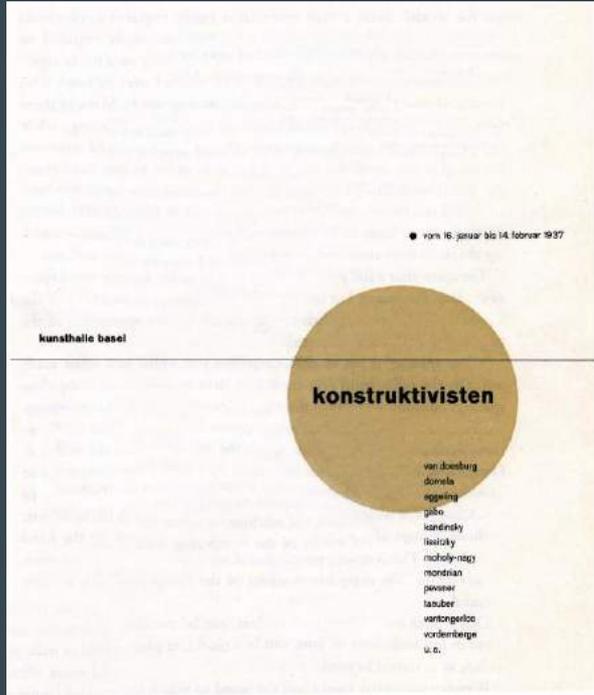
exhibit comparisons

02	05	06	07
08	13	15	16
28	28	31	33
34	27		

exhibit comparisons

03	04	09	10
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Layout



Grids, again.



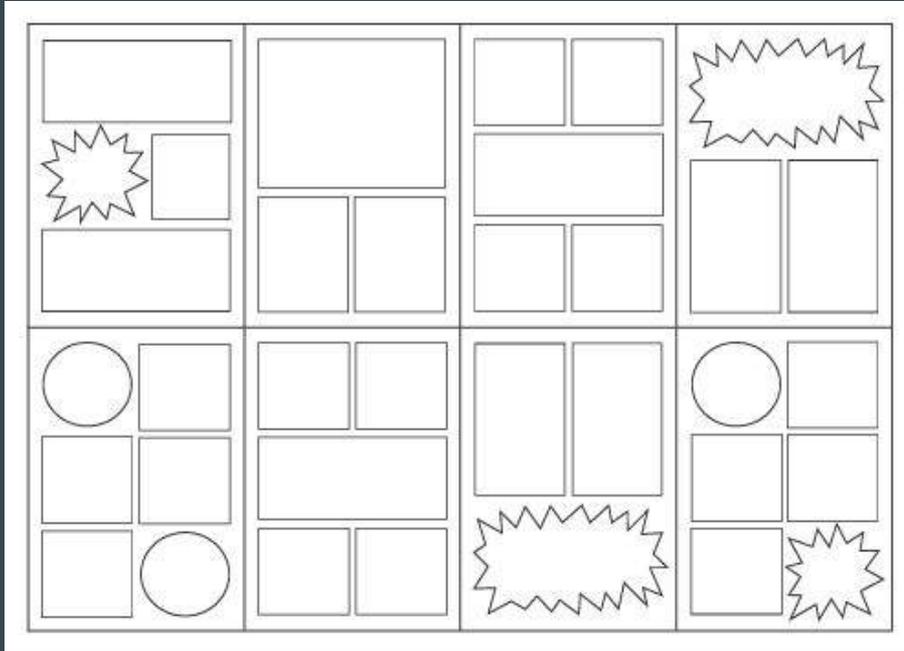
Modernist layout



Images first, text second.

Pictorial pages supported by text



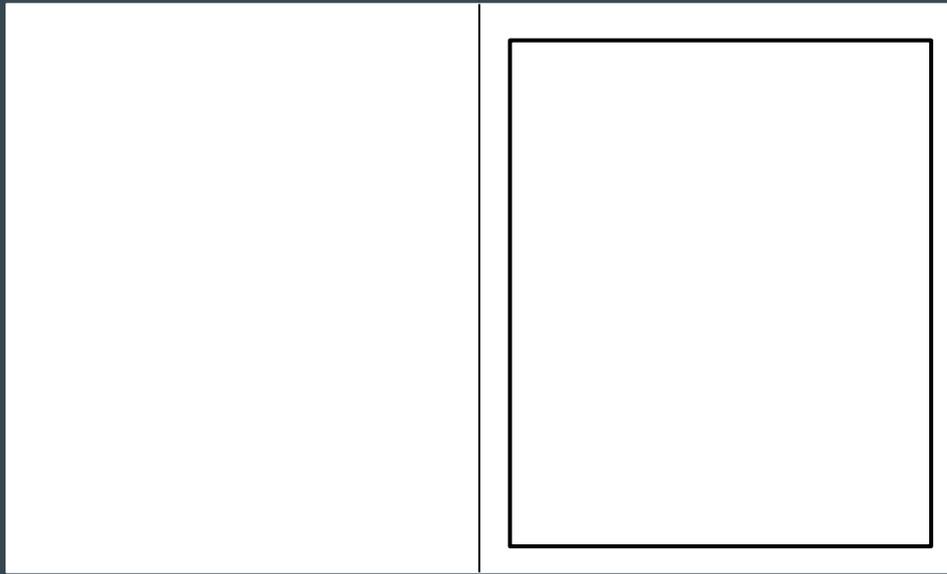


Determined by illustrator.

Drawing shapes, speech boxes and proportions are important in piecing the narrative.

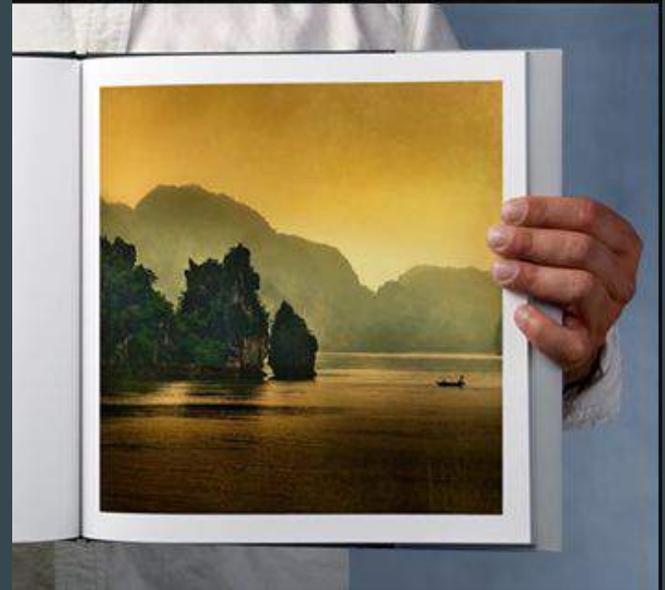
Comic books/Graphic novels

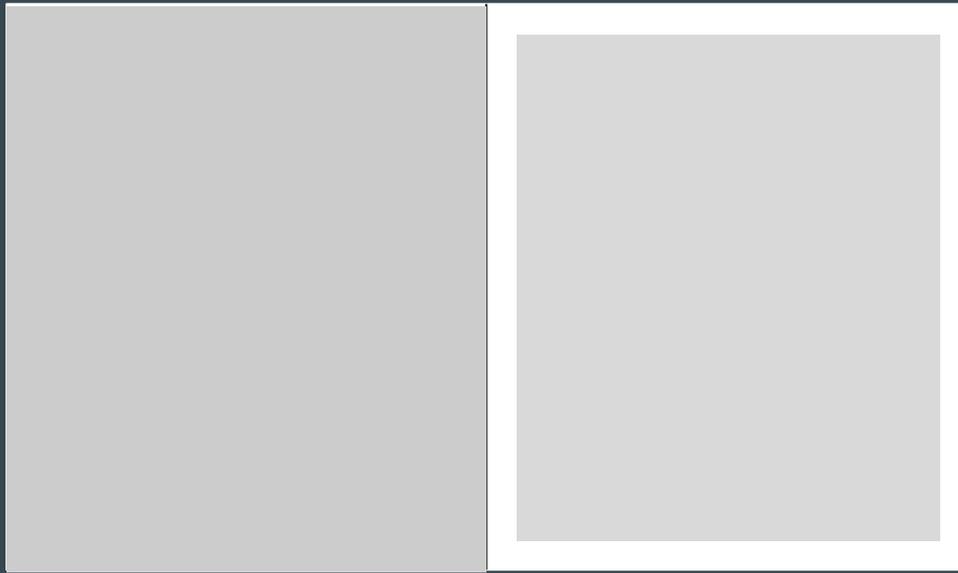




Framing device within a layout, typically photographic.

Passe-partout: Use of frames





Pictures that break the grid, occupying the entirety of a page.

Maximises visual impact.
Used as a contrast to negatively spaced pages.

Full-bleed pictures



Summary

By examining the range of approaches to book design, one should be able to put together that knowledge and the message that they want to bring across in an impactful way.

Thank you.

References

Haslam, Andrew. *Bookdesign*. 1st ed. New York: Abrams, 2006.

Samara, Timothy. *Making And Breaking The Grid*. 1st ed. Gloucester, MA: Rockport Publishers, 2005.