
How to Design Scientific Posters?

**A good scientific poster makes knowledge accessible.
Therefore, we need visual clarity in the design.**

What follows is advice on achieving visual clarity when designing a scientific poster.

ADJUST ALL ASPECTS

Communication only functions as a whole.

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**All aspects need to fit and support each other.
No single aspect is more important than another.**

Communication only functions as a whole.

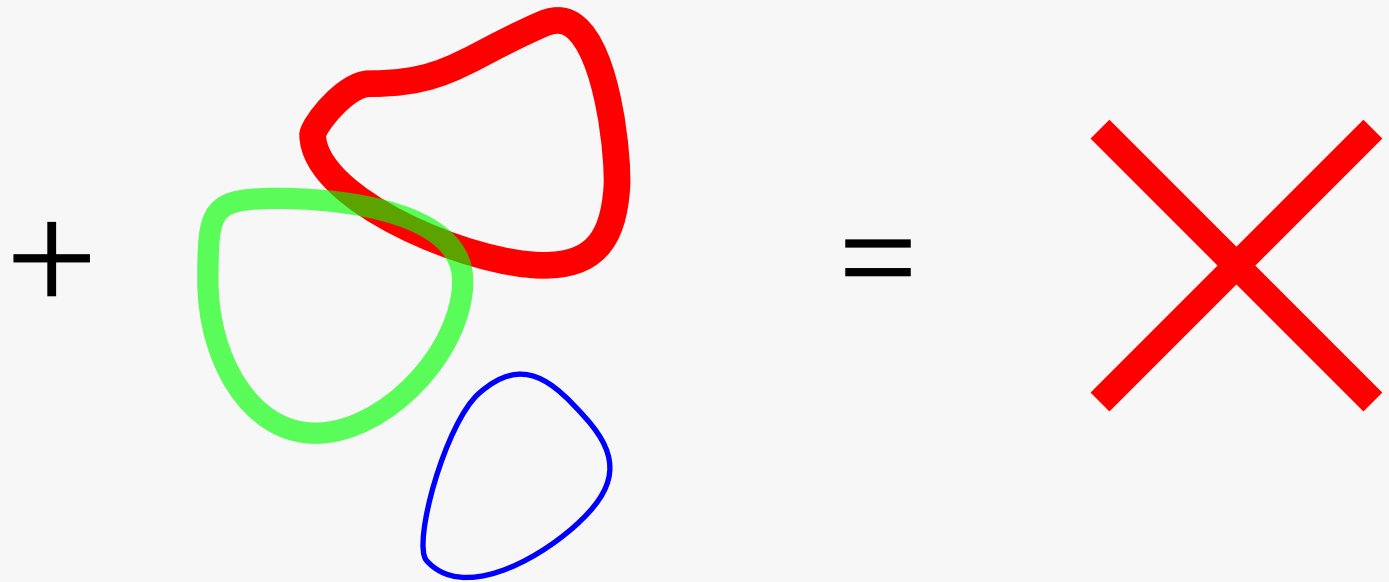
Good Manuscript

Some really nicely written bla bla bla
bla bla bla bla bla bla bla bla bla bla
bla bla bla bla bla bla bla bla bla bla
bla bla bla bla bla bla bla bla bla bla
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bla bla bla bla bla bla bla bla bla bla.

No Visual Clarity



Communication only functions as a whole.

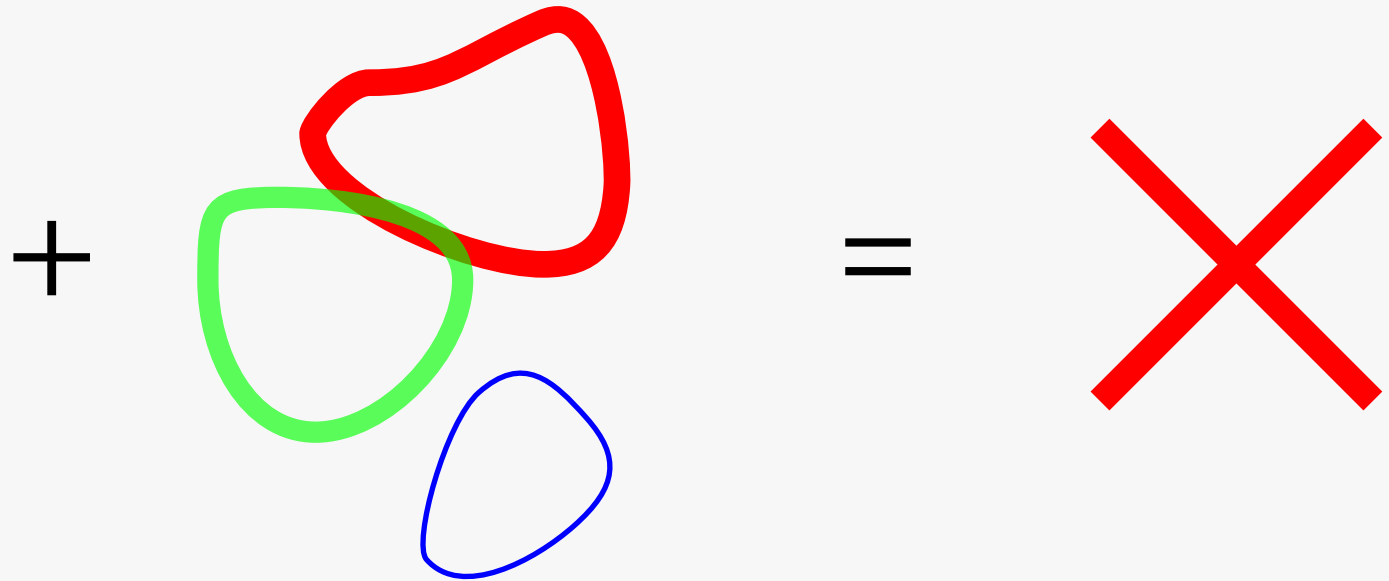
Good Manuscript

Some really nicely written bla bla bla
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bla bla bla bla bla bla bla bla bla bla.

No Visual Clarity



Keep

**Adjust &
Improve**

Communication only functions as a whole.

Bad Manuscript

Some really terribly written blaataaaaa
bla blillalalalalla bla

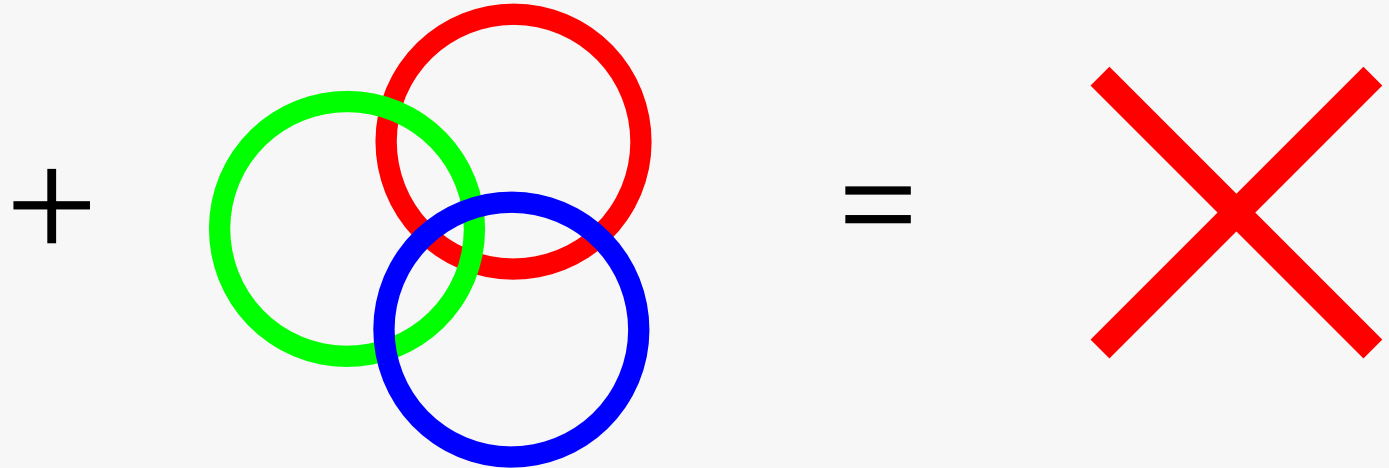
bla blablablaba blaataallalal bla

bla blaataaa bla bbbblal bla.

Bla blaataaaaa bla blillalalalalla bla
bla blablablaba blaataallalal bla
bla blaataaa bla lalal bla bla
blablablaba bla blaataallal
blaba bla blaataaa bla bbbblal bla
blaaba b b blaataaa bla bla.

Bla blaataaaaa bla blillalalalalla bla bla
blablablaba blaataallaba blaataaa
bla bbbblal bla lalal bla
bla blaataallal
blaba bla blaataaa bla bbbblal bla
blaaba b b blaataaa bla bla.

Visual Clarity



Communication only functions as a whole.

Bad Manuscript

Some really terribly written blaiaaaaaa
bla blillalalalalla bla

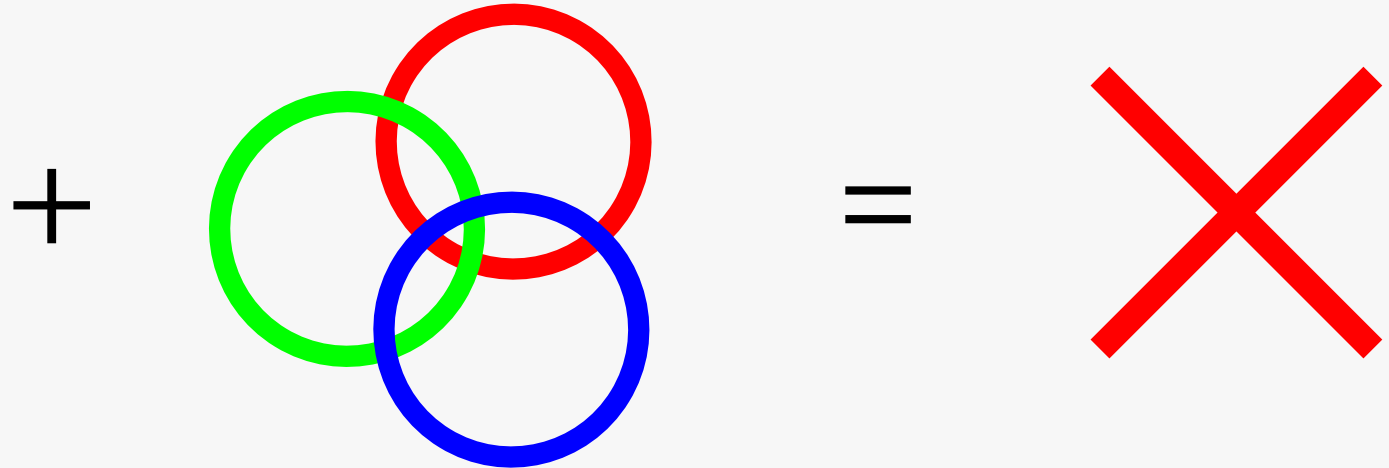
bla blablablaba blaiaaallalalal blabla

bla blaiaaaa bla bbbblal blabla.

Bla blaiaaaaaa bla blillalalalalla bla bla
bla blablablaba blaiaaallalalal blabla
bla blaiaaaa bla lalal bla bla
blablablaba blabla blaiaaallal
blabla bla blaiaaaa bla bbbblal blabla
blaiaabla b b blaiaaaa bla blabl.

Bla blaiaaaaaa bla blillalalalalla bla bla
blablablaba blaiaaallabla blaiaaaa
bla bbbblal blabla lalal bla
bla blaiaaallal
blabla bla blaiaaaa bla bbbblal blabla
blaiaabla b b blaiaaaa bla blabl.

Visual Clarity



Adjust & Improve

Keep

Communication only functions as a whole.

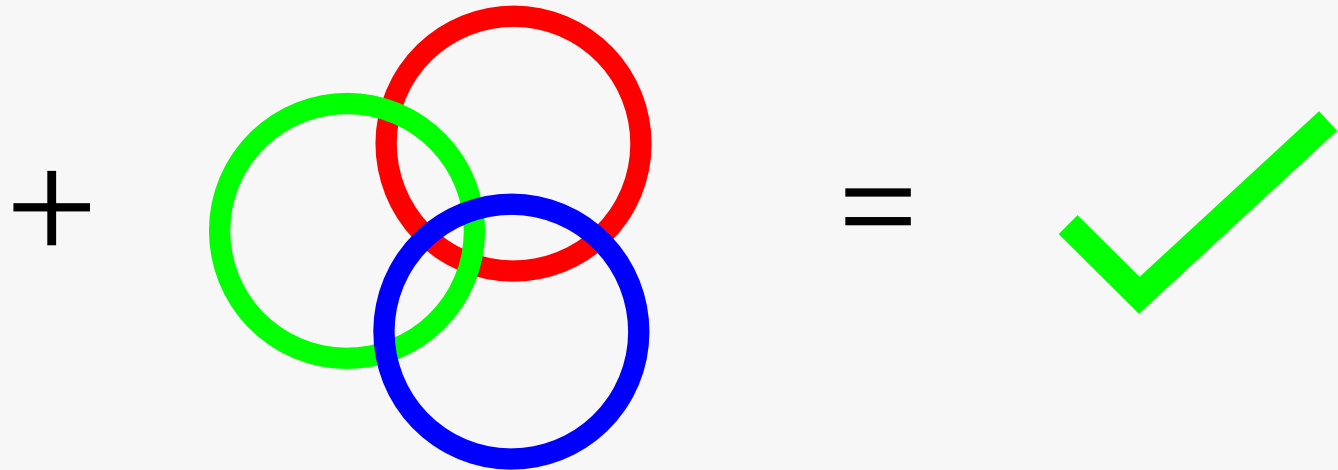
Good Manuscript

Some really nicely written bla bla bla
bla bla bla bla bla bla bla bla bla bla
bla bla bla bla bla bla bla bla bla bla
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Bla bla bla bla bla bla bla bla bla bla
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bla bla bla bla bla bla bla bla bla bla
bla bla bla bla bla bla bla bla bla bla.

Visual Clarity



MIND THE VISUAL HIERARCHY

The visual hierarchy should reflect the hierarchy of the content.

Three elements of descending importance should have three levels of descending visual impact.

A

A

B

B

C

c

Three elements of descending importance should have three levels of descending visual impact.

A

A

B

B

C

C

Try to adjust only one visual parameter to create different levels of visual impact.

A

A

B

B

C

C

Do not mix different visual parameters.

A

B

C

A

B

C



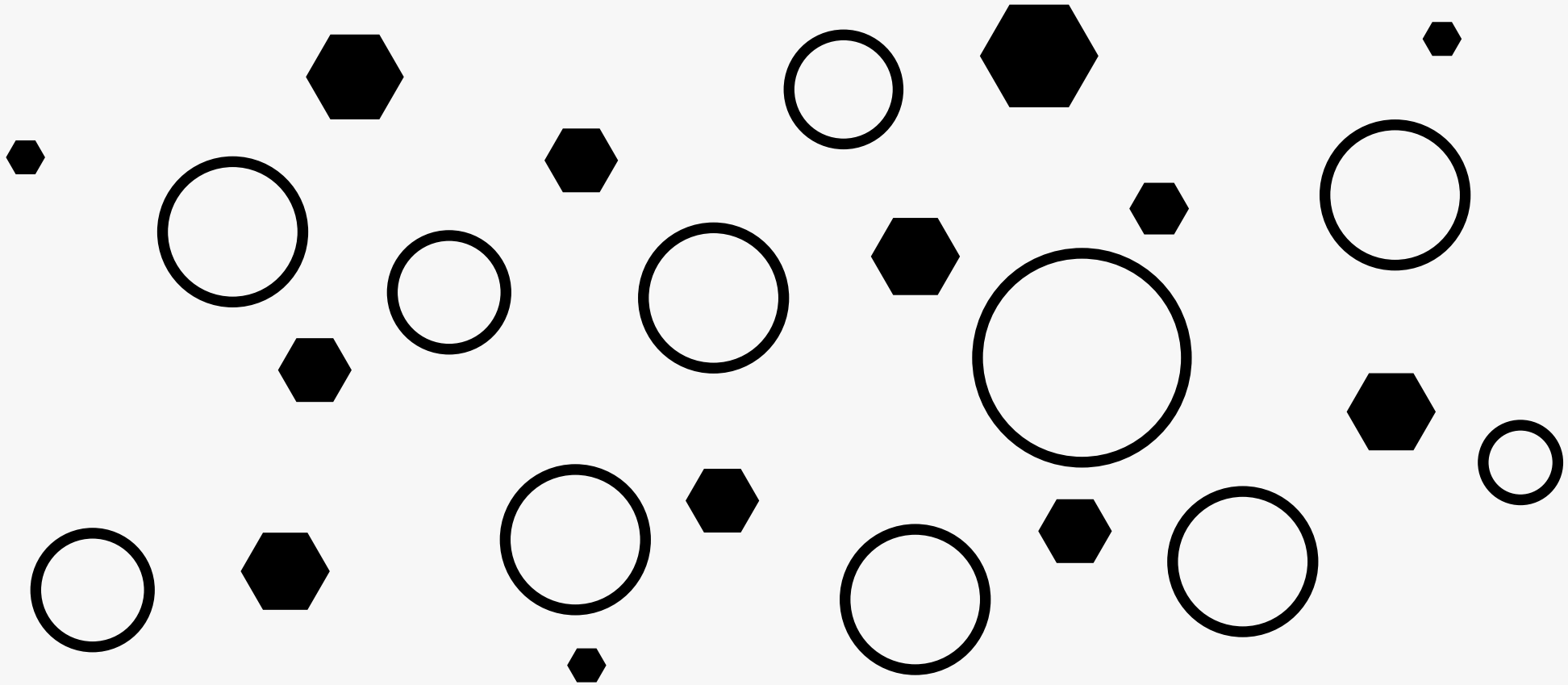
KEEP IT VISUALLY CONSISTENT

A scientific poster usually focuses on one single topic, hence it should also use one single visual language.

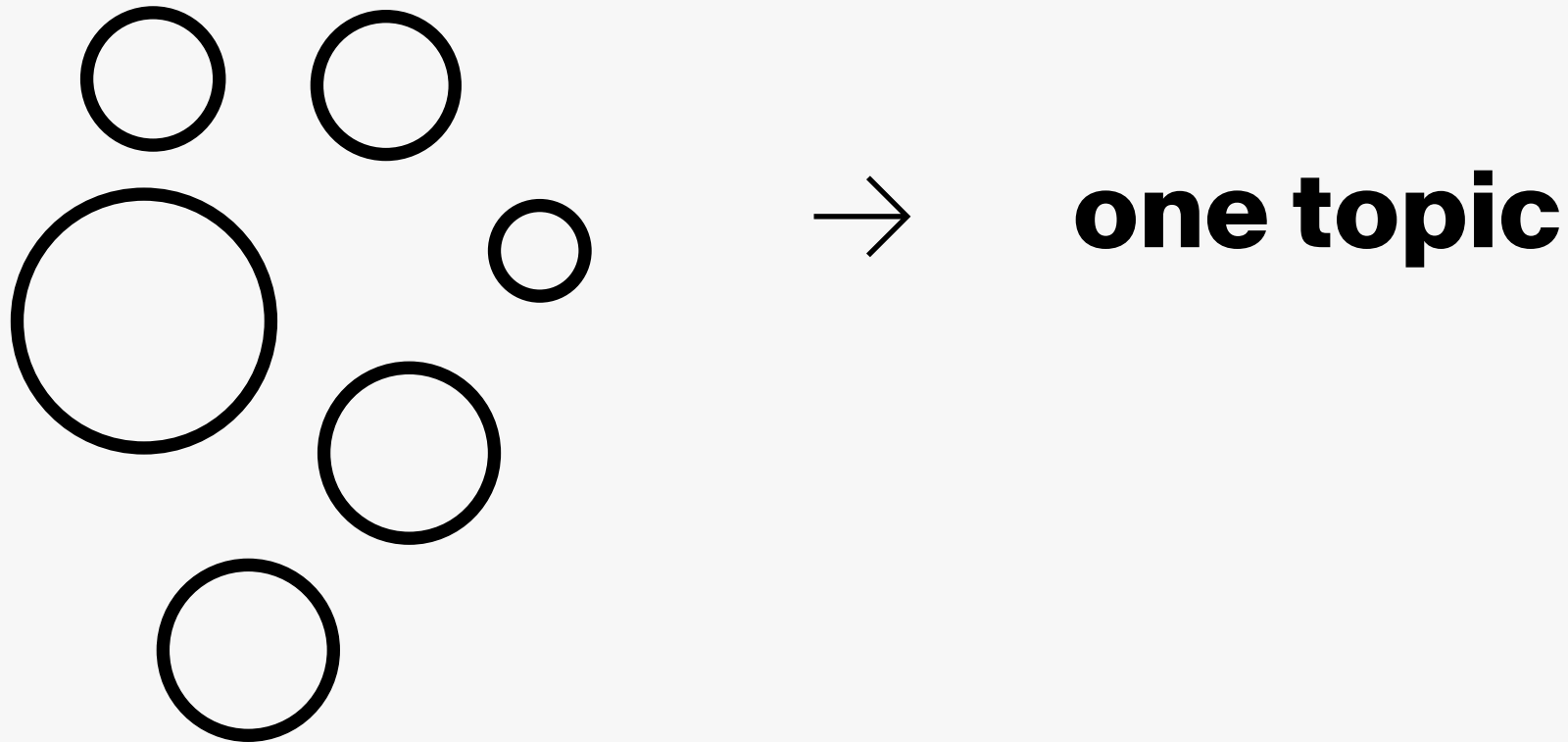
Law of Similarity (Gestalt Psychology):

**Elements that look similar
are perceived as belonging together.**

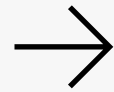
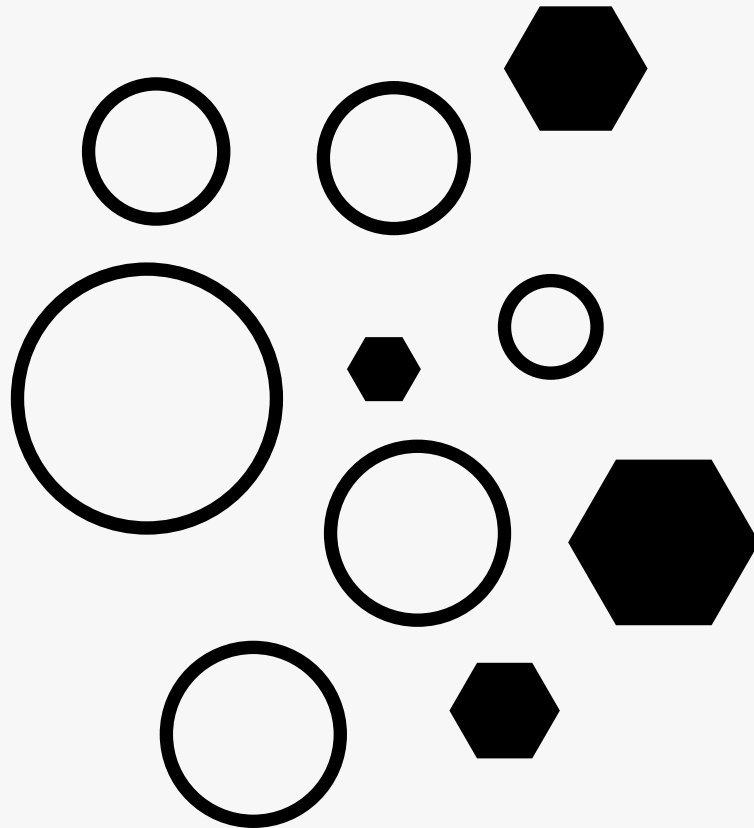
Law of Similarity (Gestalt Psychology):



If all elements share the same visual language (look similar), the design signals that all elements are about the same topic.



If some elements do not look visually consistent, it signals that a separate topic is getting introduced.



multiple topics

**You achieve visual consistency in your design
by treating all Contours the same way.**

Footnotes

Graphs

Captions

Headlines

Subheadings

Paragraphs

Images

Quotations

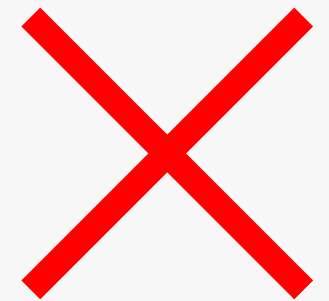
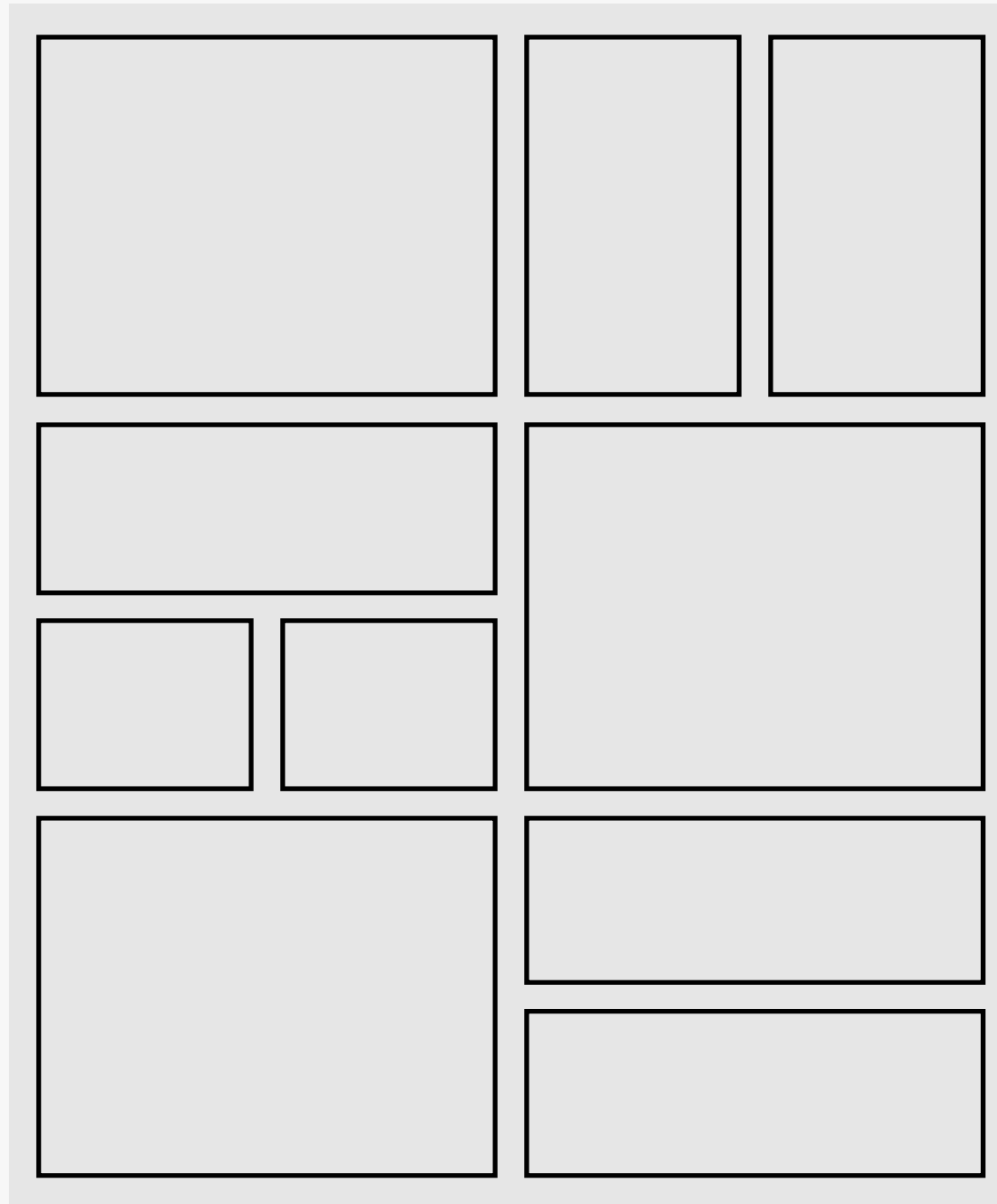
Tables

Emphases

...

CONSIDER WHITE SPACES

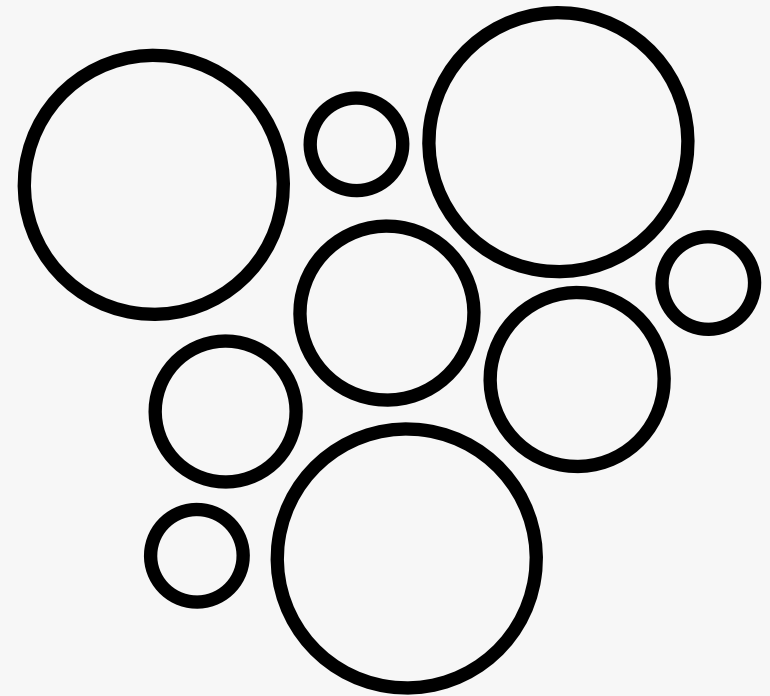
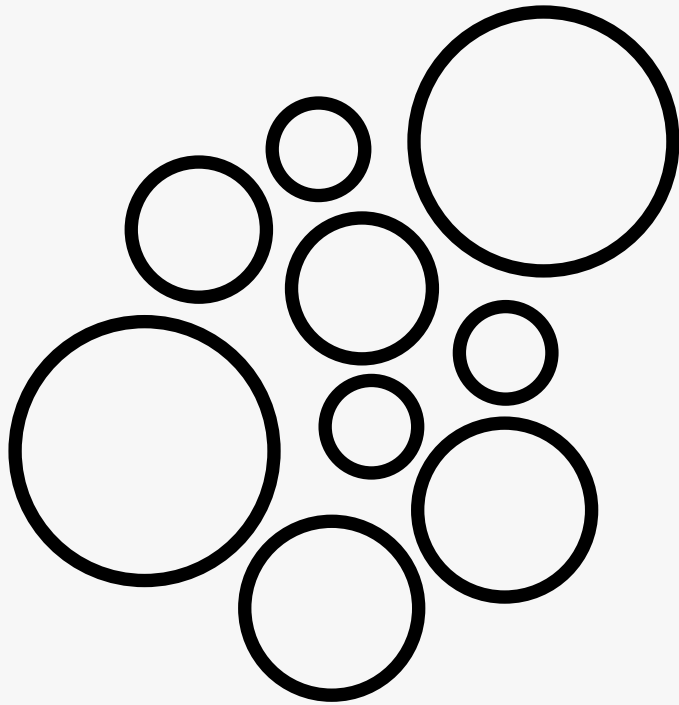
Creating a layout is not a game of Tetris.



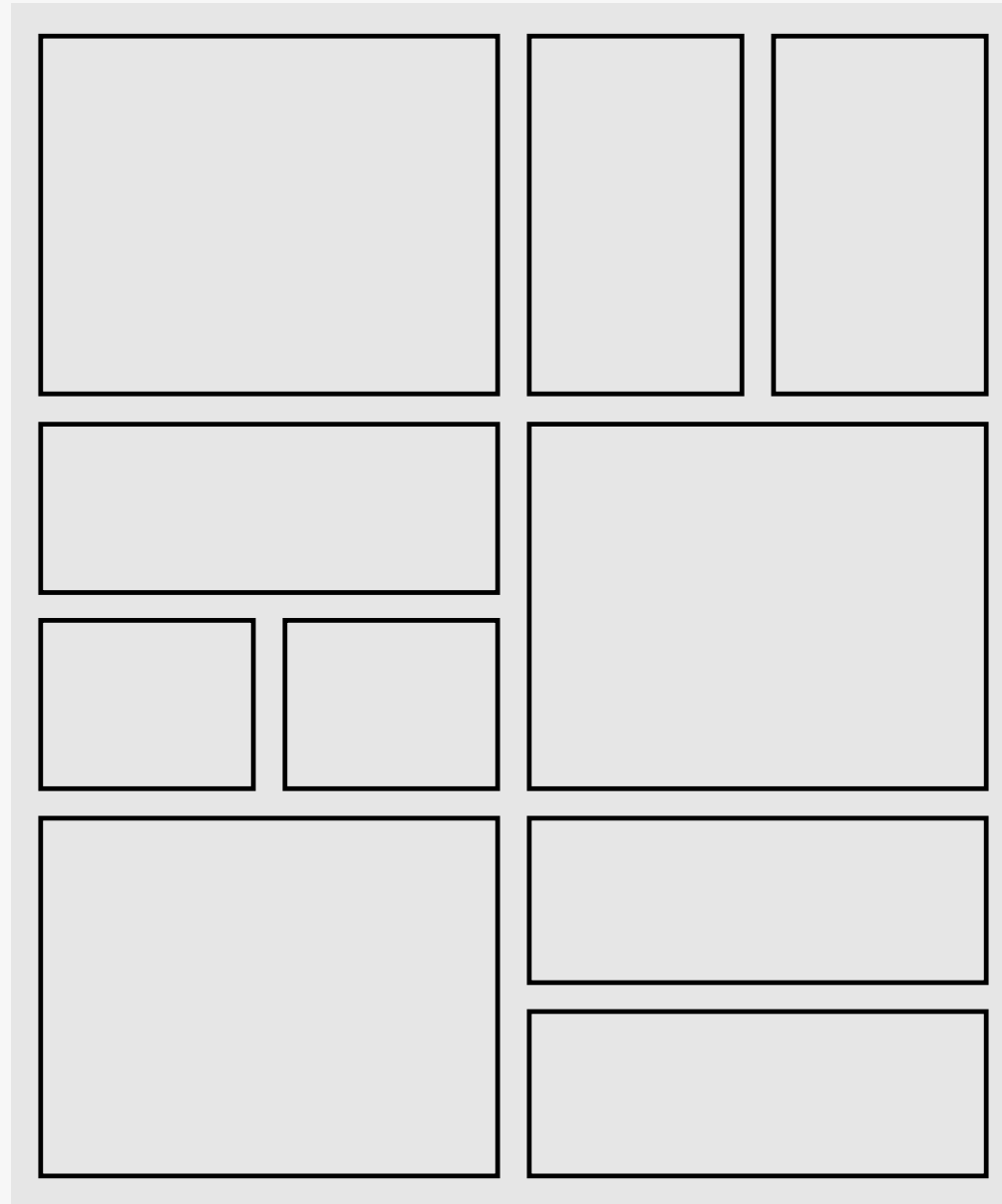
Law of Proximity (Gestalt Psychology):

Elements that are close to each other are perceived as belonging together.

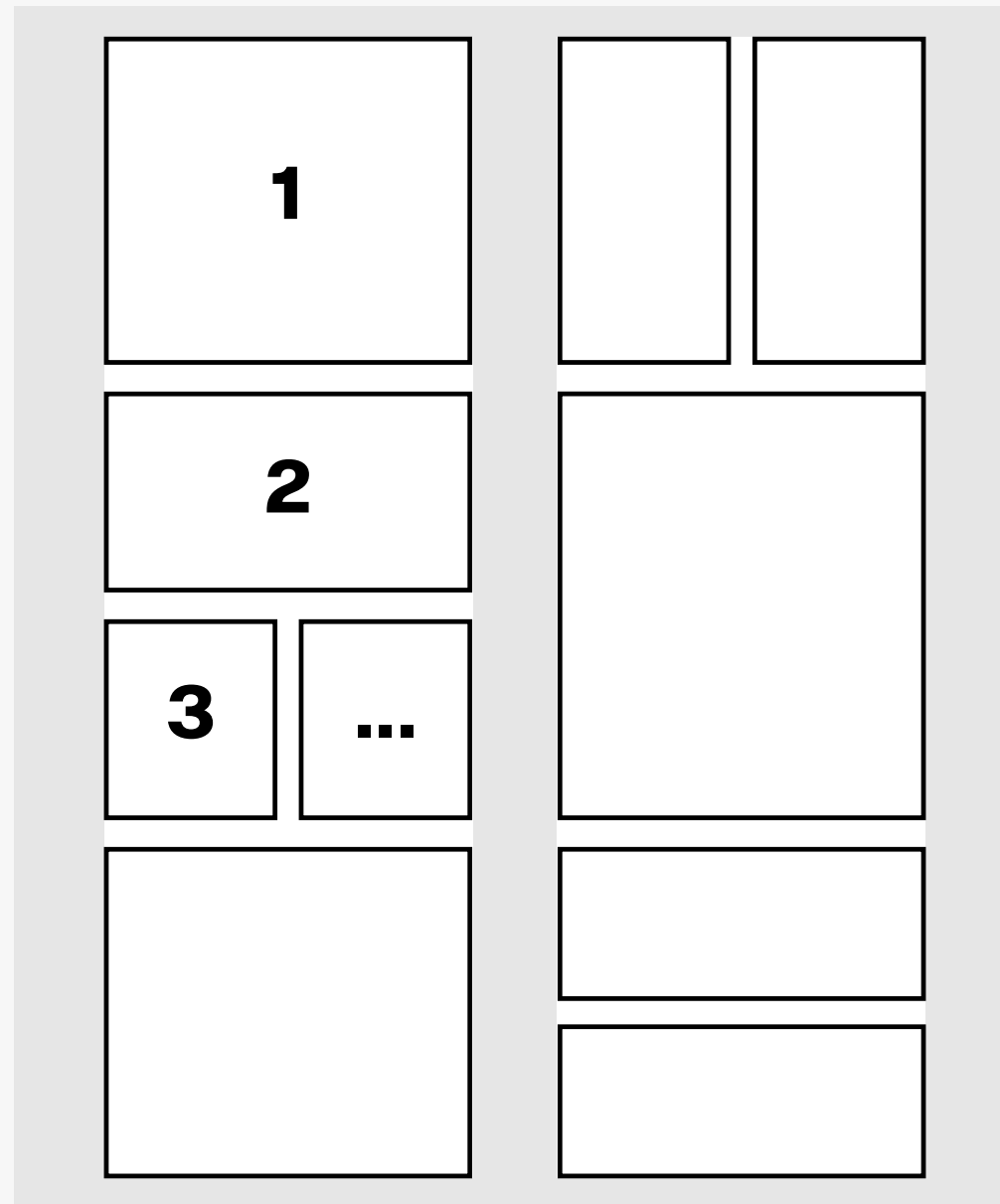
Law of Proximity (Gestalt Psychology):



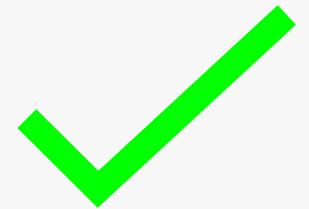
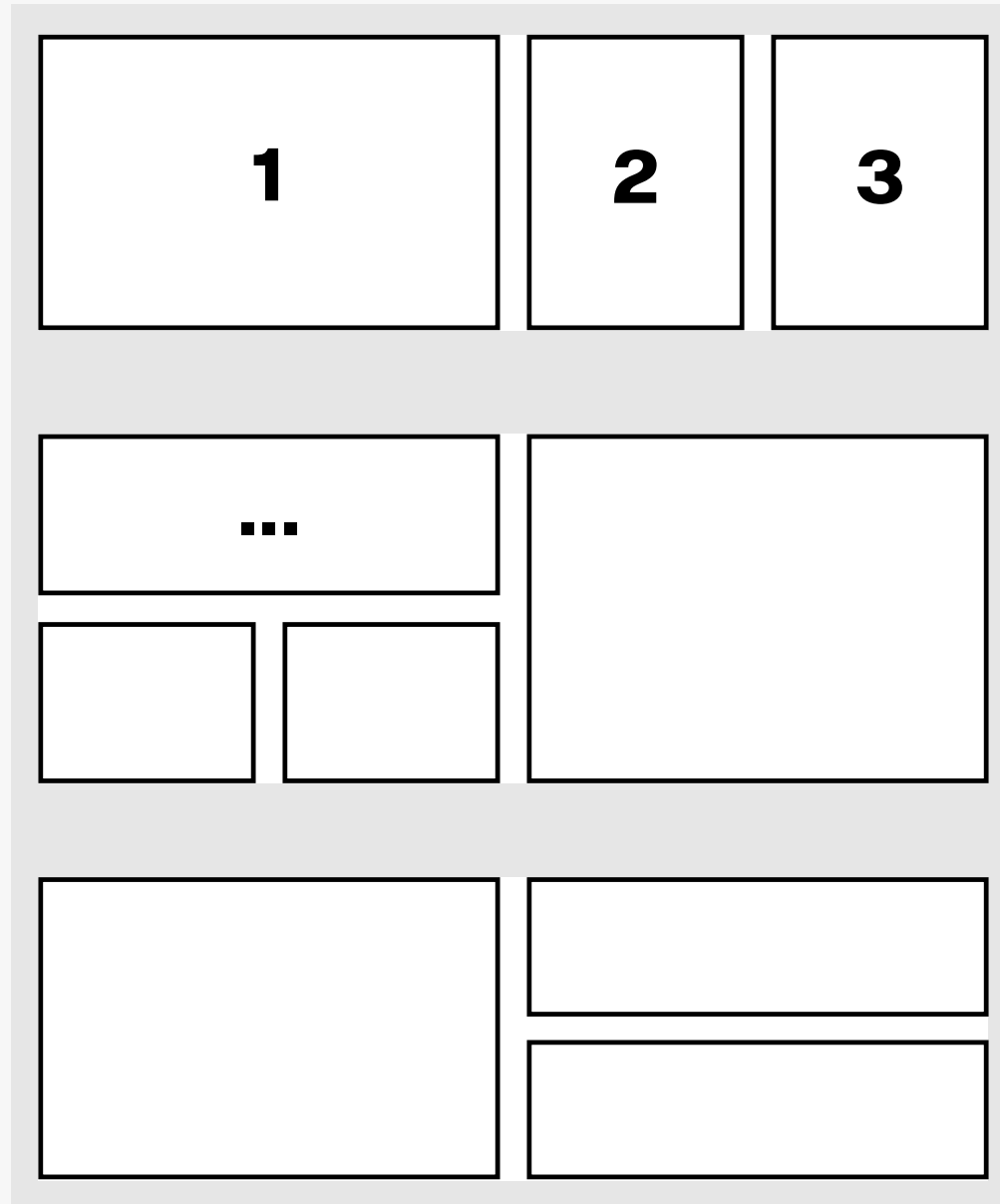
Do not fill everything up.



Use white space to structure your layout.



Use white space to structure your layout.



LINE THINGS UP

Be exact when arranging elements in rows or columns.

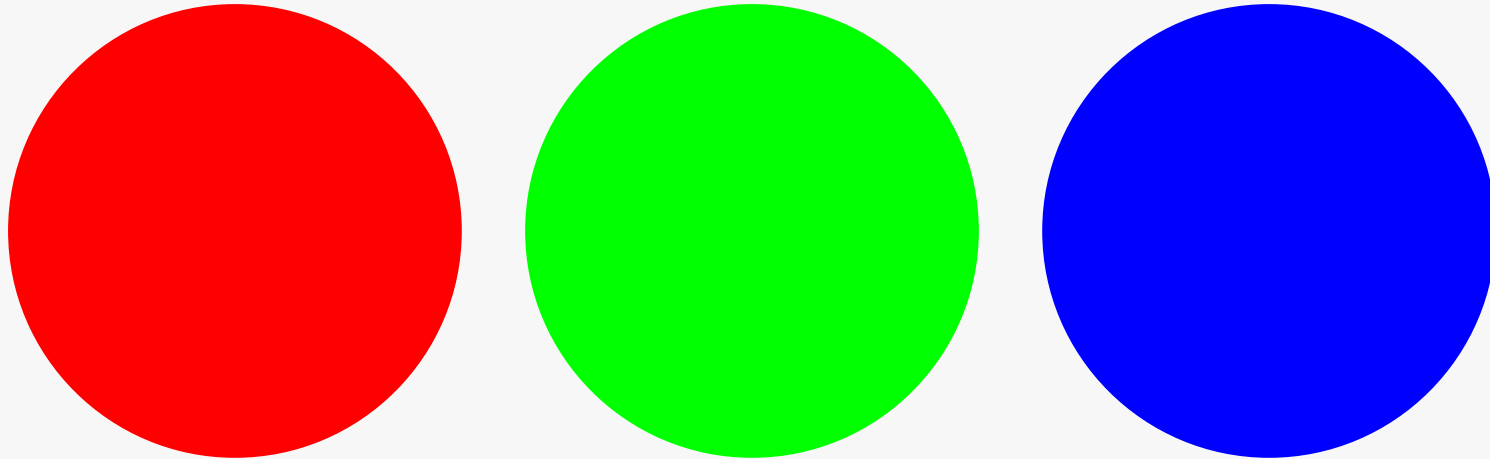
USE COLOURS WISELY

There is no general need to use colours at all.

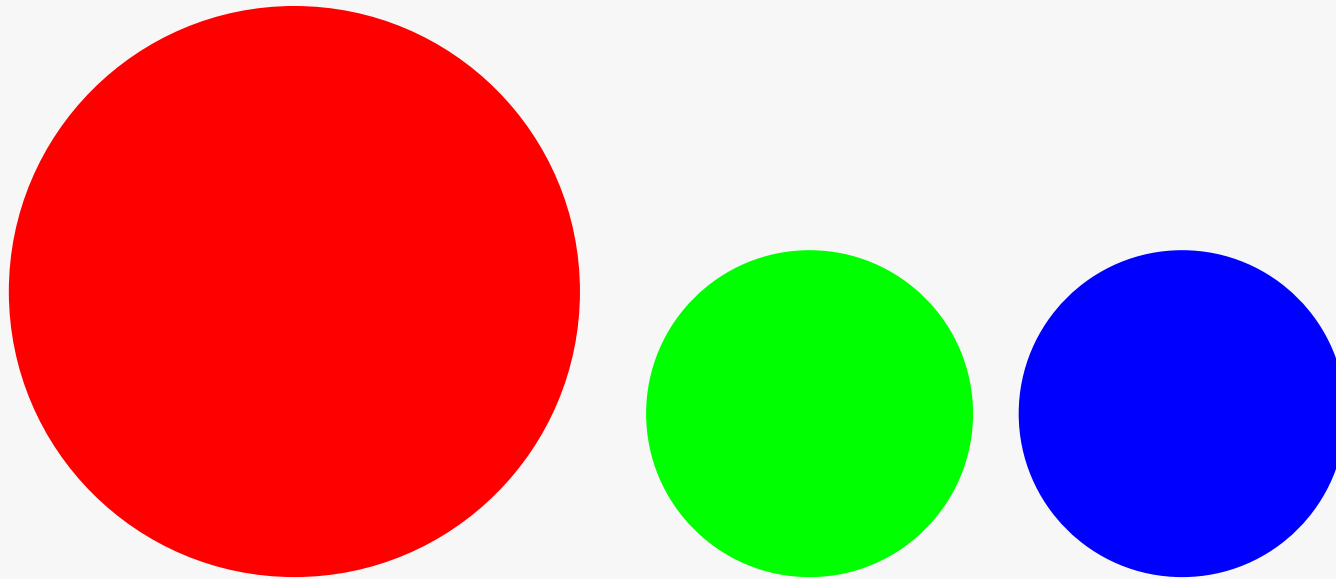
There is no general need to use colours at all.

However, if you want to work with colours ...

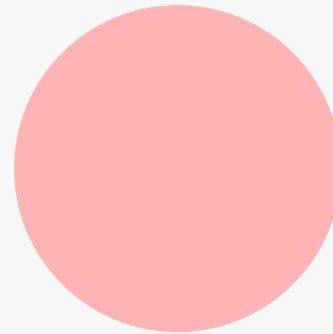
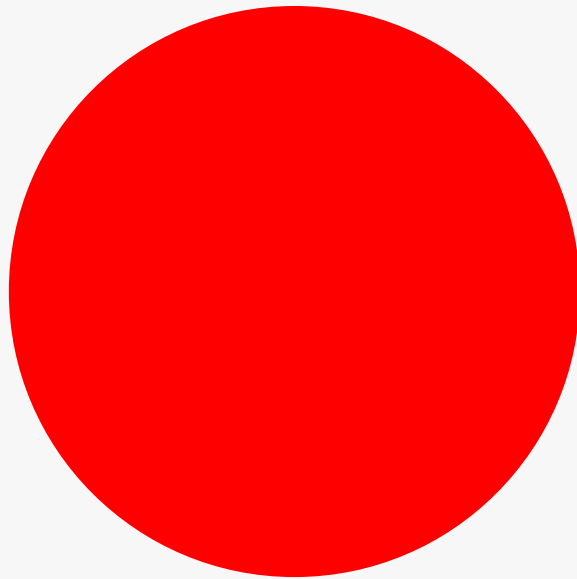
Limit your colour palette to a maximum of 3 colours.



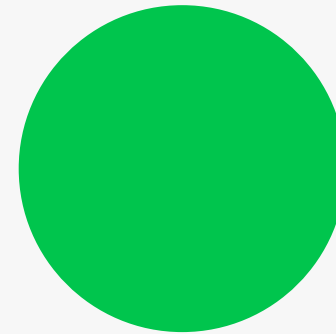
Determine one colour as your primary one.



Derive the secondary colours from your primary one.



e.g.
by changing
the hue

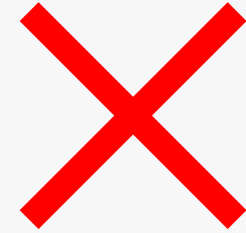


e.g
complementary
contrast

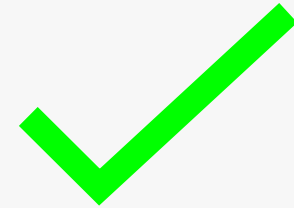
DO PROPER TYPESETTING

A column width that allows 5 - 10 words on a single line is usually considered pleasant to read.

Typesetting is the composition of text by means of arranging physical type or its digital equivalents. Stored letters and other symbols (called sorts in mechanical systems and glyphs in digital systems) are retrieved and ordered according to a language's orthography for visual display. Typesetting requires one or more fonts (which are widely but erroneously confused with and substituted for typefaces). One significant effect of typesetting was that authorship of works could be spotted more easily, making it difficult for copiers who have not gained permission. ...



Typesetting is the composition of text by means of arranging physical type or its digital equivalents. Stored letters and other symbols (called sorts in mechanical systems and glyphs in digital systems) are retrieved and ordered according to a language's orthography for visual display. Typesetting requires one or more fonts (which are ...

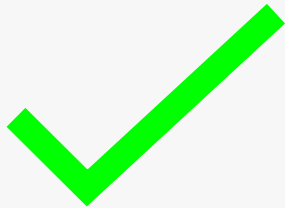


Typesetting is the composition of text by means of arranging physical type or its digital equivalents. Stored letters and other symbols (called ...



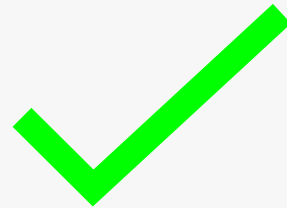
Left-aligned

Typesetting is the composition of text by means of arranging physical type or its digital equivalents. Stored letters and other symbols (called sorts in mechanical systems and glyphs in digital systems) are retrieved and ordered according to a language's orthography for visual display. Typesetting requires one or more fonts (which are widely but erroneously confused with typefaces).



Justified

Typesetting is the composition of text by means of arranging physical type or its digital equivalents. Stored letters and other symbols (called sorts in mechanical systems and glyphs in digital systems) are retrieved and ordered according to a language's orthography for visual display. Typesetting requires one or more fonts (which are widely but erroneously confused with typefaces).



 **narrow columns**

Centred

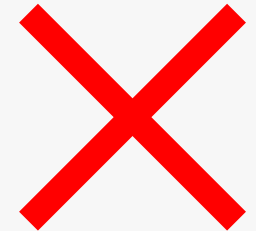
Typesetting is the composition of text by means of arranging physical type or its digital equivalents. Stored letters and other symbols (called sorts in mechanical systems and glyphs in digital systems) are retrieved and ordered according to a language's orthography for visual display. Typesetting requires one or more fonts (which are widely but erroneously confused with typefaces).



 **short texts**

Right-aligned

Typesetting is the composition of text by means of arranging physical type or its digital equivalents. Stored letters and other symbols (called sorts in mechanical systems and glyphs in digital systems) are retrieved and ordered according to a language's orthography for visual display. Typesetting requires one or more fonts (which are widely but erroneously confused with typefaces).



USE A SIMPLE TYPEFACE

Do not use eccentric typefaces.

Do not use eccentric typefaces.

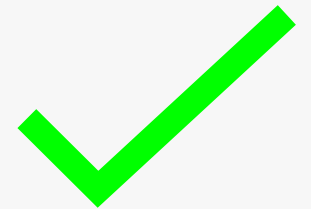
Gabriola, Hawthorn,
Courier New, Segoe Script,
SYNCO, Comic Sans,
...



Simple, boring typefaces are usually the most clear and readable ones. So, just use a simple, pre-installed font from your PC.

**Arial, Times,
Garamond, Helvetica,
San Francisco, Georgia,**

...



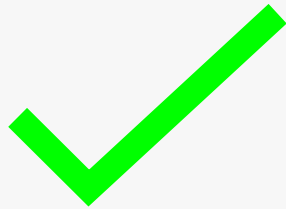
ADJUST ACCORDING TO SIZES

The effective image resolution should be over 150 dpi.



500 × 375 px

185 dpi



500 × 375 px

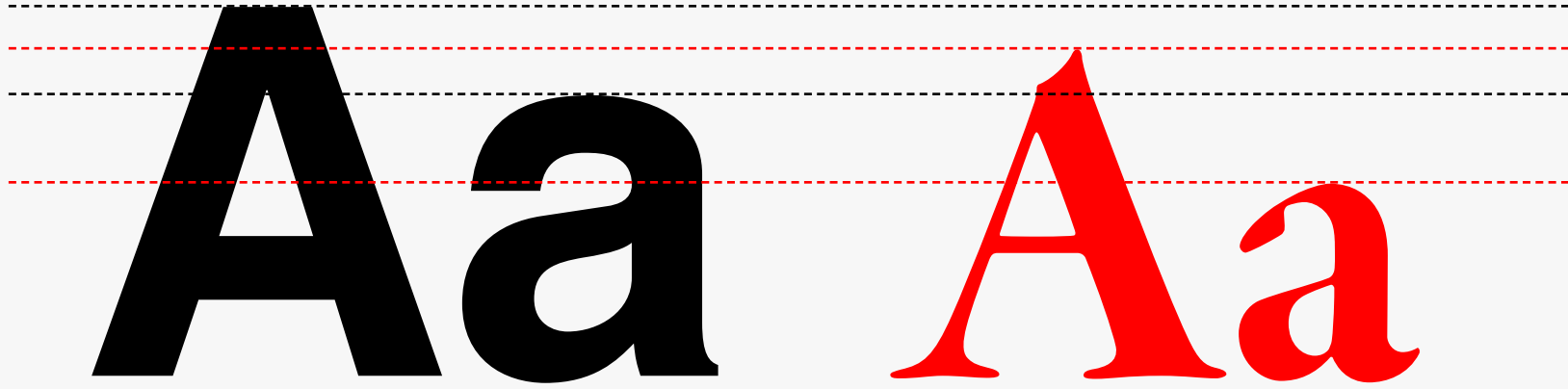
71 dpi



Side note

If the software you are using for poster design cannot tell you the effective dpi, then you use the wrong software.

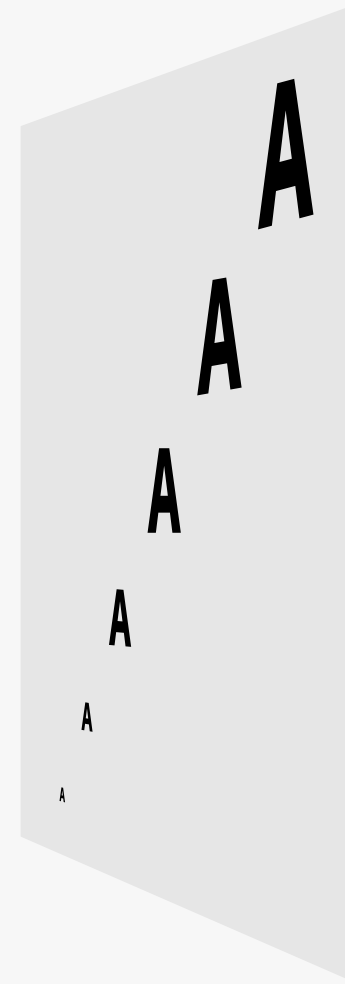
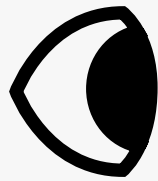
Pt-sizes do only loosely relate to the actual font size.



200 Pt, Helvetica, Bold

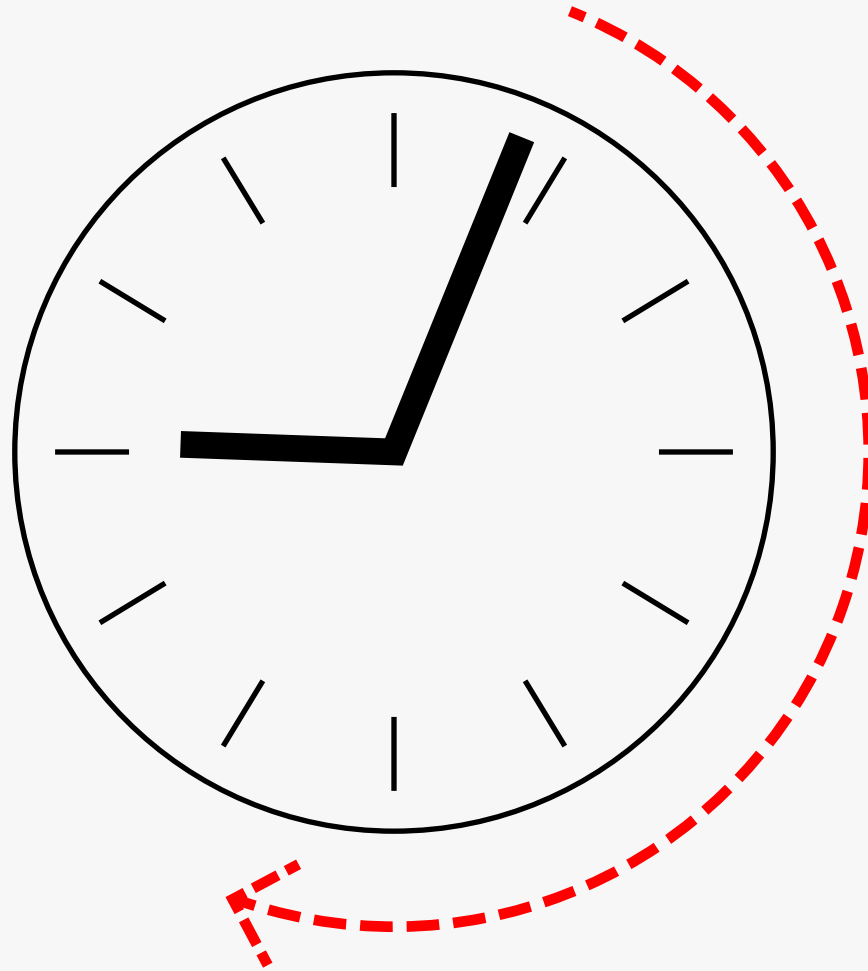
200 Pt, Garamond, Bold Display

When in doubt, print it and evaluate the sizes from a typical reading distance.



TAKE TIME → MAKE VARIANTS → COMPARE

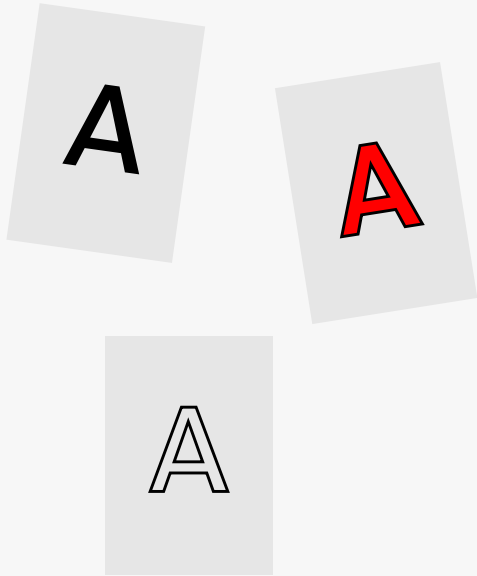
Take your time to design and properly evaluate your sketches.



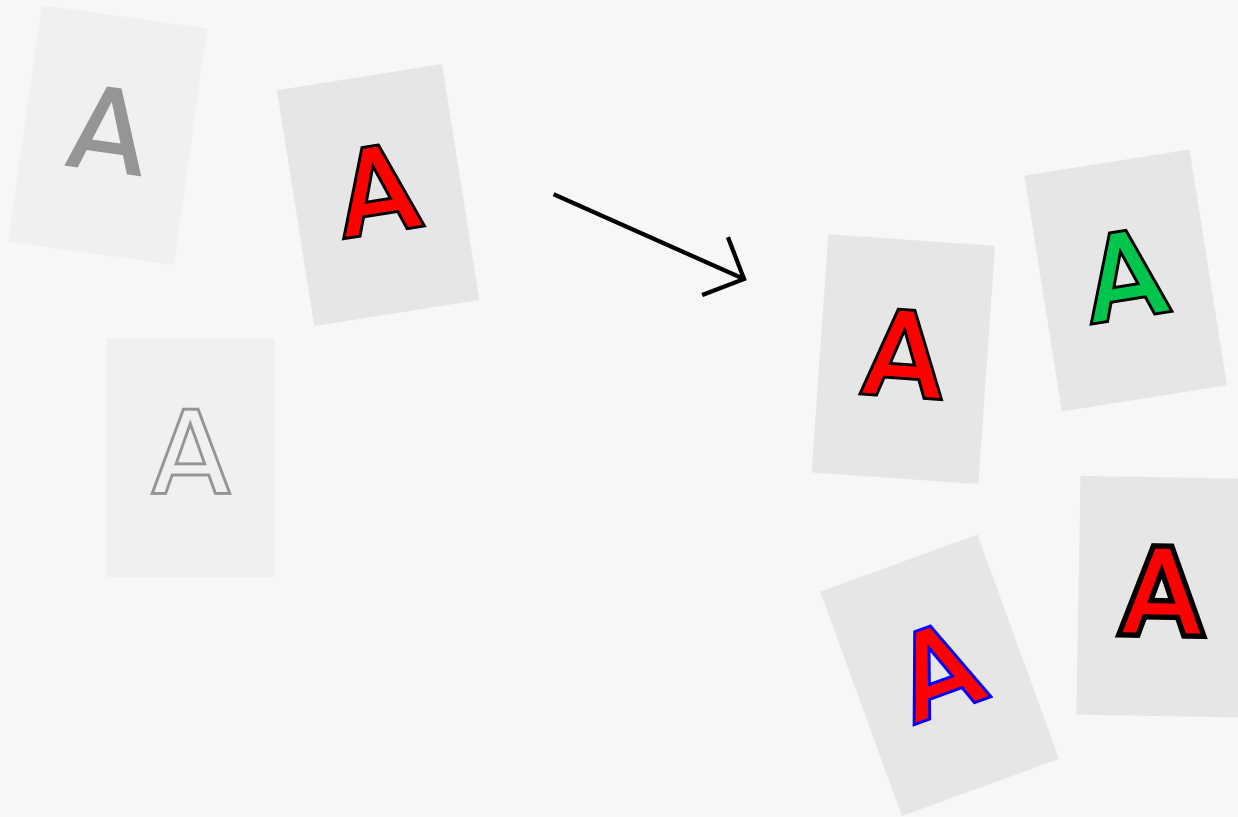
Design by creating variants.



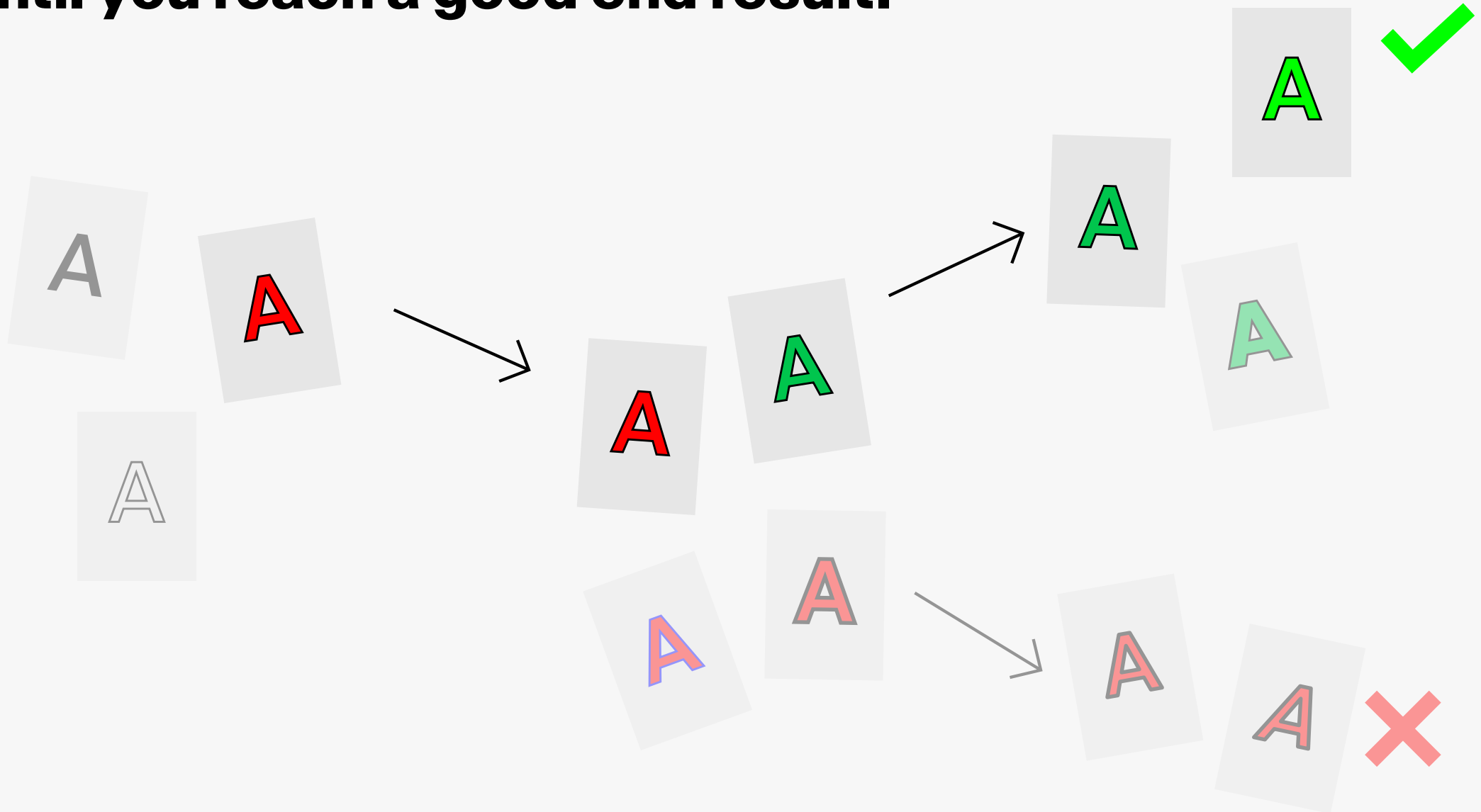
Evaluate your design by comparing all variants



Evaluate your design by comparing all variants and continue with the most promising ones



Evaluate your design by comparing all variants and continue with the most promising ones until you reach a good end result.



That's it!

If you need advice by a professional graphic designer, do not be shy and reach out to us.

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