

Guidelines

What to look at when **assessing** your own **visual work** or that of others.

Composition

- **Grids** and visual lines (columns and horizontal structures, + text lines over a grid)
- Alignments
- **Focus** (emphasis) and eye flow, groupings of the elements
- **Scale/ hierarchy** of the elements (arrangement in terms of visual importance) *Is there a clear (and justified) hierarchy between elements? Are thematically connected elements placed in association with each other? Can adjustments be made to make more relevant connections? Does the place feel scattered?* (from Krause, 2004)
- **Balance** between white space, text and figures (visual weight)
- Others: symmetry & asymmetry; repetition & rhythm, patterns, etc.

Components

- **Figures:**
 - All the elements are labelled
 - All the elements are there for a reason (avoid confounding decorations, e.g. excessive background grids or frames)
 - Colour and typography consistent with the rest of the piece
- **Photos:**
 - Resolution
 - Cropping and image composition
 - Image size and proportions
 - In context: contrast and relation with surrounding content
 - Check license for use
- **Shapes:** *how do they interact with other elements?* avoid points of tension (unless this effect is desired) *do they contribute to communicating the message?*
- **Blocks** of text / paragraphs
- **Linework** and linework variations: use lines of the same width throughout, or consistent combinations (e.g. 6pt and 12pt, but not too many different widths)
- Icons and shapes in **maps:**
 - Distinction in terms of size, shape, colour tone, colour intensity
 - Grouping of elements and positioning of toponyms: follow a homogeneous rule for placement

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Typography

- Font **type** and combinations: *what voice and character does it give to the piece? Is the use of types consistent/ logical?*
- Font **size**: *is it legible at certain distance? Does it sign the structure or hierarchy of the information clearly?*
- **Alignment**
- **Line height**
- In **maps**, look at legibility in terms of colour contrast with all the possible backgrounds in the map, and the design/ clarity of the font (fonts which proportion between cap-height and x-height –small letters– is smaller are advisable)
- If printing somewhere else, beware of font types not installed in all systems (to play safe, embed the fonts into a PDF)

Colour

- **Contrast**: test by transforming the piece into black and white
- **Palette**: *does it perform well the function of attracting/ highlighting the important components? Has a palette been chosen/ thought of or does it seem random? Is the choice of palette connected to the topic or the message?*
- **Balance** of whitespace vs solid colours
- Behaviour in **lower quality** media: black and white print, on screen, small-size prints
- Potential issues with differences between **screen and printed** colour? (especially with greens)

Books

Design for Information: An Introduction to the Histories, Theories, and Best Practices Behind Effective Information Visualizations

Isabel Meirelles, 2013

Envisioning Information

E Tufte, 1990

The visual display of quantitative information

E Tufte, 2001

Show me the numbers: designing tables and graphs to enlighten

Stephen Few, 2012

Designing Science Presentations: A Visual Guide to Figures, Papers, Slides, Posters, and More

Matt Carter, 2012

Visualize This: The Flowing Data Guide to Design, Visualization, and Statistics

Nathan Yau, 2011

Principles of Map Design

Judith A. Tyner, 2010

GIS Cartography: A Guide to Effective Map Design Hardcover

Gretchen N. Peterson, 2009 & 2014

Designing Diagrams: Making Information Accessible through Design

Jan Gauguin, 2011

Visual Strategies: A Practical Guide to Graphics for Scientists and Engineers

Felice C. Frankel & Angela H. DePace, 2012

Links

<http://design-science.co.uk/>

<http://www.wired.com/2014/12/best-science-graphics-visualizations-2014>

<http://www.edwardtufte.com/>

Choosing colours:

<http://colorbrewer2.org/>

<http://tristen.ca/hcl-picker>

<http://www.colourlovers.com/>

<http://www.vischeck.com/examples/> (check for colour blindness)

<http://lisacharlotterost.github.io/2016/04/22/Colors-for-DataVis/>

Choice of figures, depending on the data: <http://colinpurrington.com/tips/figures>

<https://mapicons.mapsmarker.com/>

Poster design:

<http://colinpurrington.com/tips/poster-design>

<http://www.the-scientist.com/?articles.view/articleNo/31071/title/Poster-Perfect/>

<http://betterposters.blogspot.co.uk/>

<http://www.makesigns.com/tutorials/poster-design-layout.aspx>

<http://justinlmatthews.com/posterhelp/posterguide/>

TED talks

David McCandless: The beauty of data visualization

Hans Rosling: The best stats you've ever seen & Let my dataset change your mindset