

Workshop on Scientific Poster design

About Me

Name : Esbern Holmes

Education : Master in Computer science and Geography

Job title : Specialkonsulent (Consultant)

Where : IMT (DPT), Building 02

Function : Teaching and advising on the use of GeoData,
including **map design** and other **data visualisation**.

The poster session

Understand the limitation of the media.

At poster sessions there is intense competition for audience attention. In their first **3 seconds** your audience will determine whether to stay and explore your content or leave.

If they stay you have **30 seconds** to secure their attention by conveying an overall understanding of your subject matter.



What is a Scientific poster ?

A **poster** is an entity the purpose of which is to **convey the main message** quickly and **facilitate discussion**.

A **poster** is **synoptic** and **synoptic** !!!

1. Synoptic = provide an overview, tell the entire story, i.e. **you must be concise and to the point**
2. Synoptic = see all at the same time, no fixed order. i.e. **you must provide a reading path**.

Two alternative views :

1. A **poster** as a **graphical object** consists of charts, maps and other graphical elements with **just enough text** to explain what is going on
2. A **poster** as an illustrated abstract between 250 and 800 words (closer to 250)

Components of efficient poster design

- The story pyramided
- Creating order
- The use of:

Space

Text

Graphics

Colour

- Design Principals



The story pyramided

The 3 second hook

The 30 second hook

The 300 second poster (Talk)

Each Level in the pyramided should if possible

tell the entire story

The 3 second hook

- The 3 second hook should:
 - Tell the **entire story** or raise a **important question**.
 - Be **readable at a safe distance** (3 Meters)
- The 3 second hook is almost always the tittle, but can be a simple graphics or photo.
- **Titles should be shorter than 7 words.**

The 30 second hook (focus item)

- The focus item should :
 - Tell the “**entire story**”
 - Occupy at least 30% of the finished poster.
 - Be **readable at “interest distance”** (1 ½ -2 Meters)
- The focus item is typically a piece of graphics.
 - Data chart (Results or the like)
 - Flowchart (Process)

Creating order

- Posters are **synoptic objects** therefore there you must **guide the reader**.
- Three classical approaches:
 - Numbering 1,2,3...
 - Graphical guides
 - Logical alt 1 : Introduction, Method, Conclusion
 - Logical alt 2 : Conclusion, Method, Discussion

Logical order

Divide your information into main sections, for example:

- **Title**
- **Introduction** - statement giving quick overview of poster
Problem - statement of the problem
- **Method** - brief description of the processes and procedures
- **Results** - outcomes, findings, data
- **Conclusion** - summary, discussion of significance of results, a few easily remembered key conclusions
- **Where to find out more –**
 - Contributors: Persons and organization Inc. **contact info**
 - References Inc. Data sources

Graphical/numerical order

- The simple way to guide the reader is by numbering the elements in reading order.
The use of clipart numbers may make layout process easier.
- Graphical arrows or references to/from a flow chart.
The flow chart will then typically be the focus item of the poster.

Using Space

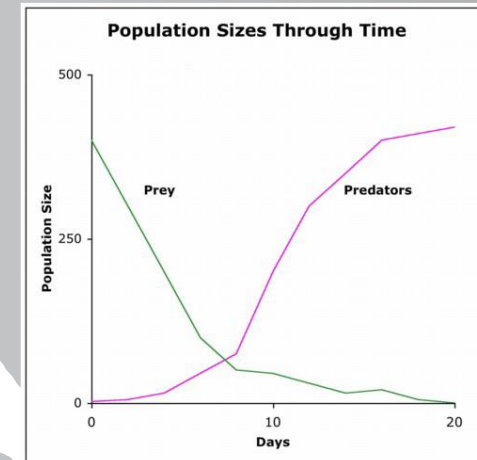
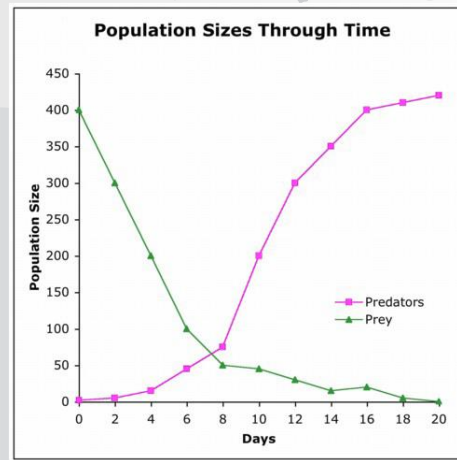
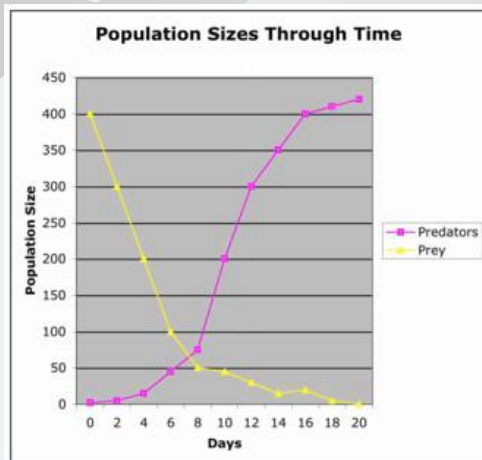
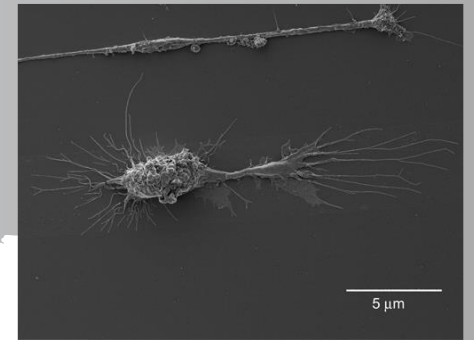
- Align photographs, headings, text materials and axes in groups of graphs
- A column of text should be between 30.5 cm and 40.5 cm wide. (The columns of this poster are only 26,7 cm) Leave at least 3 cm between columns
- Leave a minimum of 2-4 cm of clear space around the inside edge of your poster (this poster uses 2 cm
- In total around 30 – 40% of the poster should be “white space”

Using Text

- Your main title should be large, 90-150 point bold and readable at a distance of 3 meters (The title of this poster is 118)
- Text and titles written entirely in capitals are harder to read, use title case in English
- Body text should be 30-32 point, sans serif readable at a distance of 1 meter the text of this poster is 30 points Arial
- Use max two fonts preferably serif for the body text and sans-serif for titles
- Use left aligned text, short columns of justified text often look terrible.

Using Graphics

- Aim for 40% graphic content, try to find ways to show visually what was done
- Give photos a caption and perhaps a scale bar
- Label directly on maps, charts, and graphs
- Simplify charts and graphs
- Ensure that graphics match the poster colours
- Simplify charts and ensure readability at the same distance at the text.



Using Colour

- Avoided complex backgrounds
- Ensure contrast between foreground and background
- Reduce the use yellow and red (Alerts)
- Choosing colours using Hue, Value and saturation is easier than RGB.
- Design or pick a colour palette early in the process and stick with it. <http://paletton.com/>

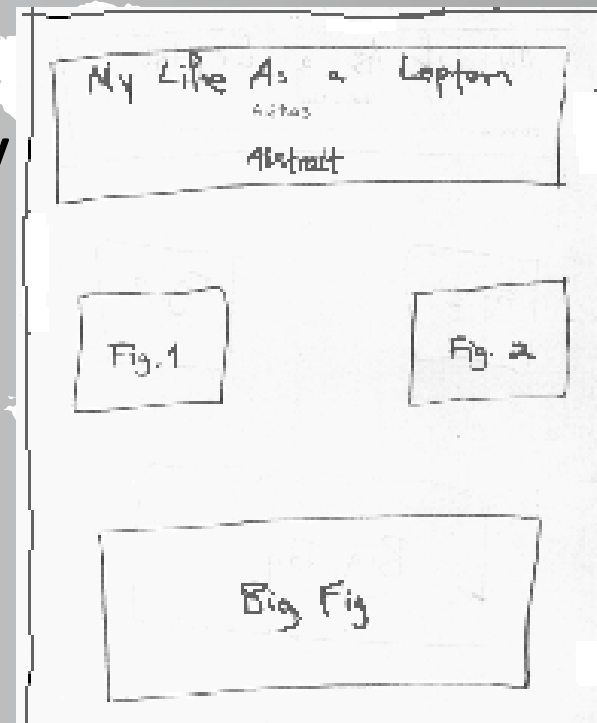
Colour has meaning

Colour	General Feelings Evoked
Black	Heavy, mournful, highly technical, formal, death
Brown	Earth, simplicity, outdoors
Blue	Peace, tranquility, trust, confidence, security
Purple	Royalty, wisdom, spirituality, mystery
Green	Nature, environment, health, reptiles, insects
Gray	Conservative, practical, reliability, security, staid
Red	Passion, excitement, love, intensity, heat, aggression
Orange	Warmth, expansive, flamboyant
Yellow	Optimism, happiness, idealism, imagination
White	Purity, reverence, cleanliness, simplicity

Design Principals

Design principles:

- **KISS** (Keep it simple Stupid)
leave out all unnecessary information
- **CRAP**
Contrast, Repetition, Alignment, and Proximity
- Start with a simple paper sketch of the key elements



Using PowerPoint

- Set your page size and orientation by going to Design -> PAGE SETUP. The largest size available in PowerPoint is 142 x 142 cm. (A1 is 59,9 x 84 and A0 is 84 x 118,8). To use the width of the plotter role use a paper format that is 36 x 25,4 inc (90,3 x 63,89 cm)
- Turn on rulers and guides by going to VIEW > RULERS > GUIDES. Rulers should appear at the top and left hand side of your document. Horizontal and vertical guides should appear in the centre of your screen. To create additional guidelines hold down CTRL, click on an existing guideline and drag a new one from it.

Using PowerPoint

- Use guidelines to mark off a 3 cm margin of unprintable area around the inside of your document.
- Use guidelines to make the columns you need
- To copy text into your document from a word processing program, select a section of our text in your word document and copy it. In your PowerPoint document select EDIT > PASTE SPECIAL > FORMATTED TEXT (RTF). Use the text box handles to adjust your text to fit into your columns.

Poster evaluation

tools

- <http://paletton.com/>
- <https://color.adobe.com/> (adobe farver)
- <http://duspviz.mit.edu>
- <https://www.google.com/fonts>
- <https://www.pinterest.com> (inspiration)
- <https://www.genigraphics.com/templates>
- <http://www.qr-koder.dk/>
- RUC “**Designmanual**” / “**billedbank**”