Conference Poster Design

Are you up to present a poster at a conference? Not easy: you have to arrange the contents on let's say one square meter, have an expensive print made, carry a clumsy tube on the plane, and then finally, on the meeting, stand next to your panel while everybody walks past ... you would pray for an *oral*.

And yet, our conferences keep on organising poster sessions, even in our digital era. In huge halls hundreds of panels stand there full of crammed data. Unfortunately in such a poster session you can search very long for a poster that looks nice. Here, with nearly 30 years experience in the field, my tips and tricks for better poster design.

Content

Keep your poster concise. One should be able to read it in a few minutes. A poster session is not an ideal environment to delve into complex graphics and lengthy text. As a rule of thumb: between 300 and maximum 800 words (in ms Word: Review > Word Count; in ms PowerPoint: File > Info).

The poster is viewed from a distance of 1 to 2 m. Don't force your viewers to push their nose against the panel, not even for figures or tables with small details. A good guideline is: if you fit the poster to an A4 print (hand-out), all text should be legible.

The more straightforward your poster looks, the more successful it will be.

If you don't know wich component to shorten or drop, ask a colleague.

The **abstract** belongs to the conference book, *not* on the poster.

Poster size

In general, the conference guidebook will tell you what size to use. On European congresses the poster panels are often not more than 1 m wide and a portrait size is appropriate. In the USA panels use to be wider and landscape posters are common. Don't try to fill the complete panel of 2×1 m or more. A large poster is more expensive to print and difficult to handle. At the University of Antwerp, standard poster size is 90x120 cm.

Software

In practice, researchers use to make posters in ms PowerPoint, though it is not particularly suited for it. At the Nieuwe Media Dienst, University of Antwerp, you can find a manual about making posters in Powerpoint.

Better results are possible with good lay-out software like Adobe InDesign.

In the absence of good software, experience or time, you could outsource the design of your poster to a professional.

Typography

- **Text width**: text is best legible at 40 to 60 characters per line. If a line is too long, the eye has to do too much distance. Remember the final print size. Except for the main title, a text block of more than 50 cm wide is too large; preferably use blocks of about 30 cm wide.
- **Text height**: give the body text structure and points to rest: hold a maximum of 10 to 12 lines of continuous text, after which you should split in paragraphs. Choose consistent line spacing: either in ms Office: 1 to 1.15; or expressed in points, i.e. for a text of 30 pt: between 36 and 40 pt.



• Font size:

Main title: 80 - 100 pt
Block titles: 40 - 60 pt
Body text: 24 - 32 pt
Figure captions: 20 - 30 pt



Tables: 20 - 30 pt References: 16 - 24 pt

- **Fonts**: don't use more than 2 different fonts on one poster. You might as well use just one font. The preferred font at the University of Antwerp, Calibri, is doing very well on posters. A good choice is a sans serif font for the titles and a serif font for the body text. Choose legible, not frivolous or obtrusive typefaces. Don't use Comic Sans.
- **Alignment**: *align left*. There is no reason to choose justified text, common in multi-column layout. Without hyphenation, justified text can present with ugly wide spaces between words. Centred alignment looks a bit solemn, right alignment is possible in special cases.
- Accent: in body tekst you can accent tekst by *italics*; <u>underlined</u> is to be avoided; **bold** is better for
 titles. I prefer not to use special effects like shadow, outline, and bevel. Don't type body TEXT IN ALL
 CAPS: that looks like you are shouting. Negative text, with or a light color on a dark background, can
 be used sparingly, i.e. for block titles.

Heading

- Main title: in Sentence case, not in Title Case or ALL CAPS. Make the title stand out by its font size. This is the only text line that can span the whole poster width. You can divide the title in a main line and a second, typographically different, line, like "New evidence". Try to avoid a third line.
 - *Tip: I like the main title best with left alignment.*
- **Authors**: like: David PETERS¹: first name in full last name in capitals, number of affiliation in superscript, no titles like *Prof dr*. A number of 6 to 8 authors are maximum.
 - Tip: it looks nice to list the names vertically in one or more columns.
- Affiliation: in author sequence, 1 line per affiliation
 like: ¹Radiology, Antwerp University Hospital, Belgium
 the designation "Department of ..." can be left out
 repeating words like "University of Antwerp, Antwerp, Belgium" is unnecessary.
- **Logos**: belonging to the affiliations in author sequence, size 3 to 10 cm, position not too prominent above right or below. Show them aligned.

Components with text

- Background / Introduction / Aim. Here you can generate interest in your topic. Provide a minimum of background information and situate the problem briefly, possibly with some references. Then perhaps the most important sentence in this poster: the central research question and the strategy that you have followed.
- Materials and methods / Study design. How did you carry out this research? Briefly describe the methods and procedures with appropriate illustrations (study set-up schedule, table with basic data, equipment, questionnaire ...) and indicate the statistical tests used.
- Results. First describe if your procedure worked well, along with the general descriptive results.
 Thereafter, the analysis of more specific data, supported by graphics or images. Keep in mind that the figure captions are often read first. This section is the largest, with up to 50% of the poster surface.
- **Discussion / Conclusions.** Repeat the main results, describe why the outcome is interesting and indicate perspectives.
- **References / Literature**. 3 to 10 citations, referenced in the text. This is the only section that can be in a smaller type. References can be in a short version (et al).
- **Contact / Further reading.** Some visitors like to know more or contact you. Give your email address, QR code or URL with more information or with the poster in pdf.

Layout

- Composition: most posters are built in a tight grid of vertical columns. Try to break out from this grid, without making it a complete mess. Compare it to the layout of newspaper pages that in our generation have become a lot more dynamic than before. Graphic elements traversing the grid can help. On a poster, a lot more is possible than on a page to be published. Color fields and background shading enable original compositions. These elements can be used with bleeding (extending to the edge). Inform the print service about that. Photos might be bleeding, but keep all tekst, tables and graphs at least 4 cm from the edge. On a poster you can even rotate text: maximum 30°.
- **Sequence**: readers look from above left to below right. Start above with the main title. Then lead the viewer's eye consecutively to Introduction > Methods > Results > Conclusions. Arrange also the figures and tables in a logical order.
- **Space to breathe**: a cluttered poster without "air" is a disaster to read. There should be a balance between information and empty space. The less crowded the poster is, the more options you have in terms of layout. Give all elements breathing space.
- Ratio: preserve the height/width ratio of all graphical elements such as photos, graphics and logos.

 Tip: Posters are usually full of frames and boxes: around the text, titles, figures ...

 by omitting these boxes, you create more air and space. Try to align the elements along invisible vertical and horizontal lines.

Colors

The use of color can cheer up your poster and pull one's attention to the right elements, but keep it sober: don't use very sharp colors. Preserve a good tone contrast between foreand background (dark on light or light on dark, but never dark on dark). Huge dark colored areas are a waste of expensive ink. When choosing harmonious colors you can consult Adobe Color CC. Mind also the color blind viewers.

Tip: Use an "eyedropper" to pick a color from a picture on your poster and use this color, eventually in a softer tone, in other elements.



Figures

- Figures happen to be more pleasant to watch than tables.
- Resolution: for poster print a final resolution of 100 dpi may be sufficient. Take care when using low-resolution material from the internet.
- Caption: should be under the figure. Take well care of these texts as they are often the first to be read. A good caption and can draw attention to read the rest of the poster.
- Charts and graphs: on a poster, graphs can look a little jazzier than in a publication: use of color, shadow etc. Use dark ink on a light background and not vice versa.
- All interventions that make a figure more quickly readable are a step ahead. Try i.e. to put symbol legends next to the lines instead of separately.
- Photos: at a minimal final resolution of 100 dpi, photos come in sizes between 10 and 25 cm. An outline of 3 to 6 pt can look nice. It's even better to integrate the figure caption in this box.

Eye-catcher: an attractive photo or drawing in a special layout you can make your poster stand out among hundreds of others. That eye-catcher should be suitable in your topic and be presented with style.



Tables

- If your poster really can't do without a table: it should also be readable from 1 m. Limit the number of rows and columns: what does a heavy table make sense on such a shortly viewed medium? Just give the essential.
- Let your table breathe. Only put borders if they are really needed for clarity.
 Vertical borders can often be left out completely. A light background color, varying between rows or columns, can help. Give table cells appropriate margins.



• The table title is, unlike figure captions, put *above* the table.

A novelty appearing on meetings are E-posters, in which the material is no longer printed on paper, but shown on a digital display. Poster design rules remain valid at E-posters, but you can use multiple pages, so that an E-poster gets features of a slide presentation.

More about over poster design

- by Colin Purrington: http://colinpurrington.com/tips/academic/posterdesign
- blog by "Dr Zen": http://betterposters.blogspot.be/

Printing

The safest file type to send your poster to the print service is pdf. Standard resolution (150 dpi for bitmaps) is sufficient. Be sure to choose the right print size.

When printing from professional lay-out sofware, you can use bleeding and crop marks.

Nowadays, the job is done on large-size inktjet printers.

I usually ask to crop the print, nicely showing the bleeding colors. Others prefer a white border.

Transport

The poster is rolled and transported in a tube, either a simple carton tube, or a telescopic plastic tube.



Hang up

What kind of panel you get? On a soft panel, push pins are suitable, although they of course make wholes at the border. For a normal poster, use 8 pins. On a hard board, I would choose poster buddies. Hang the poster nicely straight and flat.

Extras at the poster

- **Hand-outs**: some prints of the poster on A4: in a big meeting, they'll be quickly gone. Maybe it's better to keep a few handouts by yourself.
- Business cards: same comment as above.

The main thing is to be available at your poster for direct contact with the interested readers.

Success!

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