

Creating a Research Poster

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Topics Covered

- Defining “poster”
- Elements to include
- Design aspects of poster creation
 - ❖ Planning
 - ❖ Focus
 - ❖ Headings, Graphics, Text, and Colors
- Technical aspects of poster creation
 - ❖ Layout
 - ❖ Editing
 - ❖ Software

Posters defined

- Posters are visual tools that allow an author(s) to communicate main findings and conclusions about a project or research.
- You will not just cut and paste a paper and put it on a poster.
- Messages should be clear and succinct.
- Visuals and texts always point to main points and conclusions.

Elements to include

- **Title:** make it descriptive of the takeaway message.
- **Authorship:** includes you and usually your mentor (and maybe others). Give departmental and college affiliations.
- **Introduction:** why is your objective/question/thesis interesting or novel or interesting? Give the audience some context!
- **Objective/question/thesis/hypothesis:** make it is clear and concise.
- **Methods:** If you did an experiment, briefly explain how you did it.
- **Results/body of work:** What did you find out? What are your conclusions?
- **Significance:** Describe why the results matter.
- **References:** If you cite others' work, properly cite references.
- **Acknowledgements:** Include funding support.
- **CSI and CUNY logos**
- **Program logos** (i.e., Verrazano and Macaulay, SEEK, ASAP, as applicable)

Design aspects: Planning

- Determine message:
 - ❖ If your audience remembers only one idea about your work, what should it be?
 - ❖ Craft message around main points and conclusions.
 - ❖ Apply the “So what?” test: Evaluate each piece of text or graphic and try to see if it is really necessary to include. Does it pass the “So what?” test? If not, remove it.
 - ❖ Establish milestones—deadlines by which you will complete the poster.

Establishing milestones

- Hess, Tosney, & Liegel (2013) recommended “to start with due date and work back to create milestones.” Based on suggestions from these authors, here is a table to help you establish milestones for your poster:

When	What
0	Poster presentation
1 week**	Final print
1 week	Make changes suggested
1 week	Distribute draft for 2 nd review
2 weeks	Make changes suggested
2 weeks	Distribute draft for 1 st review
3 weeks	Edit draft
3 weeks	Create draft
4 weeks	Create mock poster
4 weeks	Establish message and main points
** Weeks can be turned into days depending on time constraints	

Design aspects: Focus

- Keep it simple.
 - Use simple messages
 - Omit anything that is not essential
 - Edit text carefully avoiding sentence complexity
 - Leave out the nitty gritty details—you can talk about those when you interact with your audience.

Hess, Tosney, & Liegel (2013)

Design aspects: **Headings**, Graphics, Text, and Colors

- Use headings for your title, section titles, and figure captions.
- Use headings to summarize work
 - ❖ A reader should be able to understand your main point by just looking at your headings.

Design aspects: Headings, **Graphics**, Text, and Colors

- Keep graphics simple
 - ❖ Use simple, 2-dimensional graphics, such as line graphs, bar graphs, and pie charts
 - ❖ Do not use 3-dimensional graphics (unless necessary)
- Use photos that may help to convey the message
- Use spot art (sparingly) to focus audience attention
- Write any explanation directly on figures (legends are hard to read)

(Hess, Tosney, & Liegel, 2013)

Design aspects: Headings, Graphics, **Text**, and Colors

- Text should be minimal (images and graphics are better)
- Text elements should be fewer than 50 words
- Use phrases rather than full sentences
- Use active voice rather than passive voice
- Left-justify your text
- Use a serif font, such as Times, for your text—it is easy to read (at least 24 point)
- Use a sans-serif font, such as Helvetica, for titles (5 cm high) and heading (at least 36 point)
- Text in figures should also be large
- Avoid all caps

Design aspects: Headings, Graphics, Text, and **Colors**

- Light color background with dark color letters help with contrast.
- Avoid dark backgrounds with light letters (hard on the eyes).
- Use only 2 or 3 colors to avoid overload.
- Avoid red and green combinations because some audience members are color-blind.

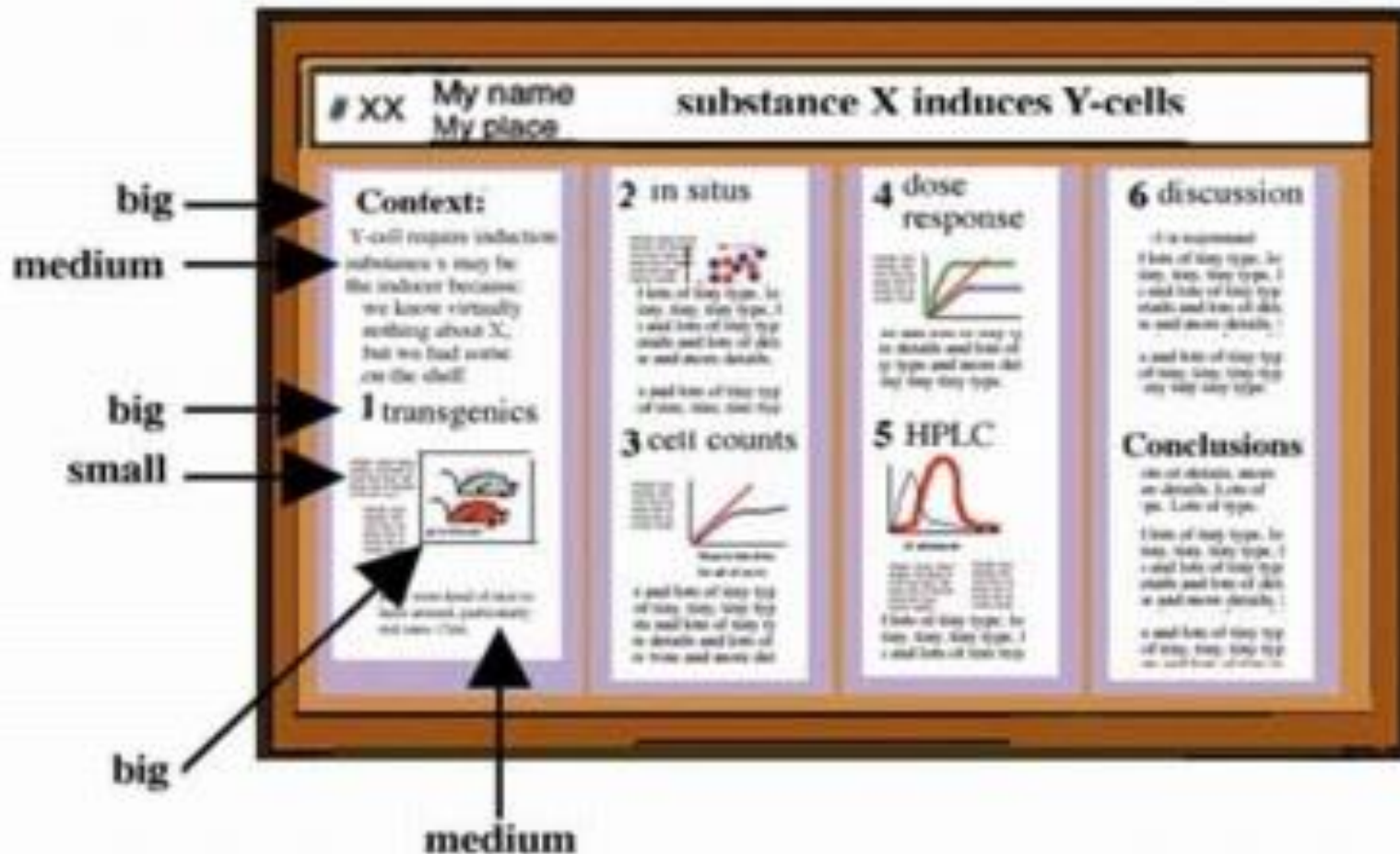
(Hess, Tosney, & Liegel, 2013)

Technical aspects: **Layout**, Editing, and Software

- When considering the layout of your poster, consider:
 - ❖ Visual cues to guide readers to the important components of you poster
 - ❖ **(Experts called this “visual grammar.”)**
 - ❖ The format of your poster. **Experts suggested the use of a columnar format.**
 - ❖ Organizational cues
 - ❖ Balance between text and graphics
 - ❖ Space: use of white space

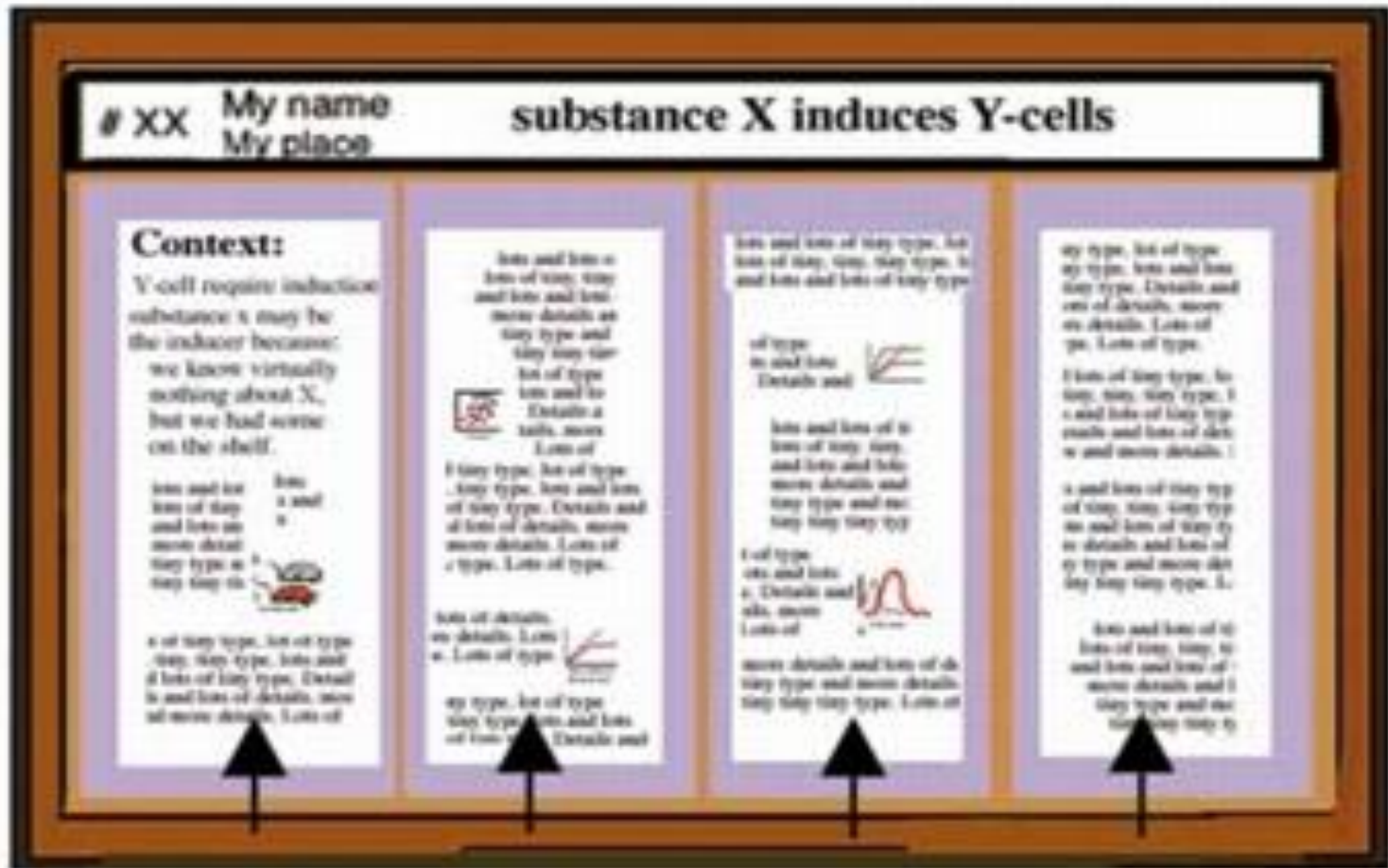
Let me show some visual examples provided by Hess, Tosney, & Liegel (2013).

Visual Cues (“Visual grammar”)



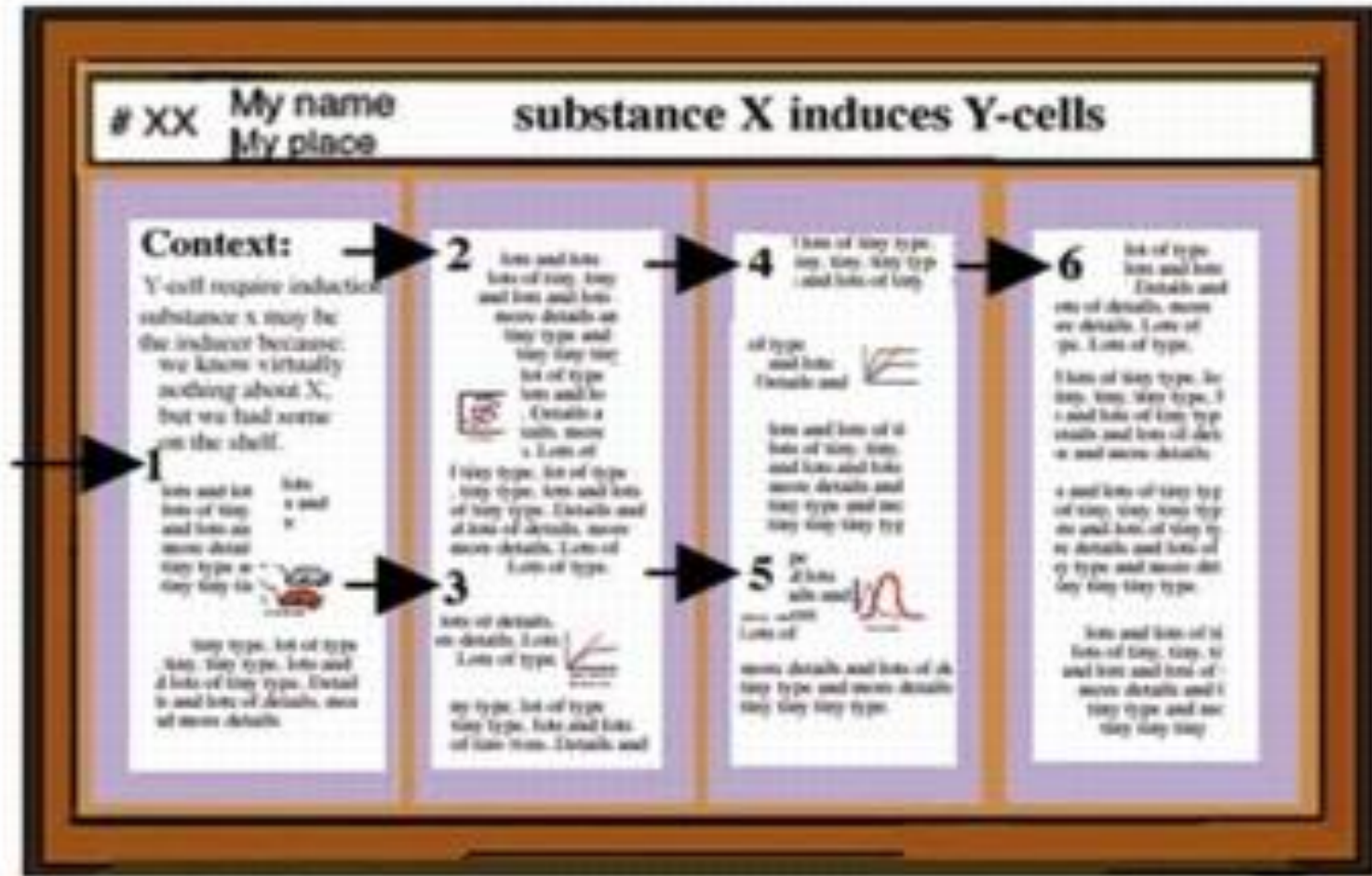
According to Hess, Tosney, & Liegel (2013), a “visual grammar is a graphic hierarchy that helps readers identify the most important parts of your poster.”

Using a columnar format



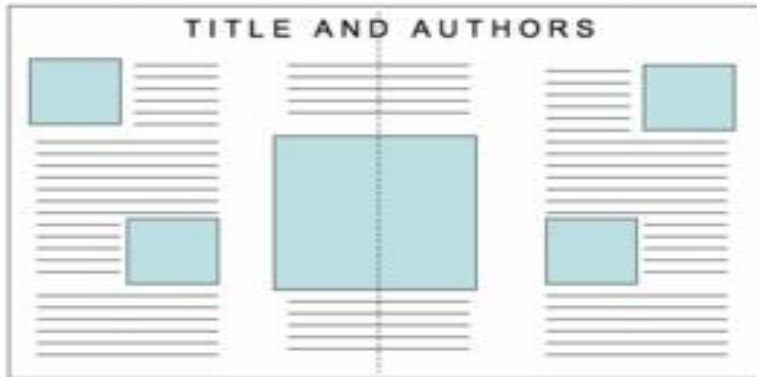
According to Hess, Tosney, & Liegel (2013), the use of columns makes it easier to read through the content of your poster.

Using Organizational Cues

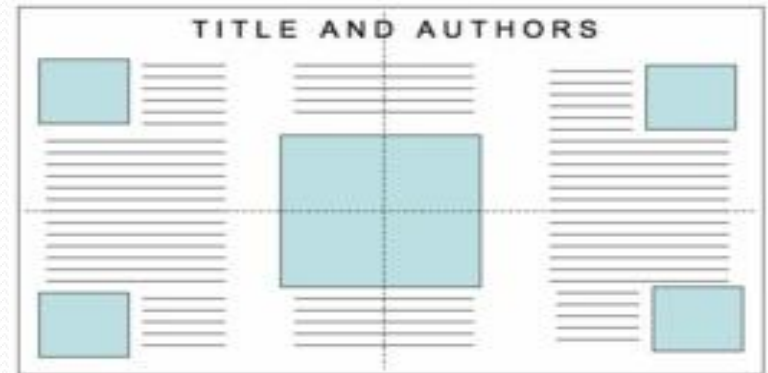


According to Hess, Tosney, & Liegel (2013), if you use organizational cues such as, numbers, letters, or arrows, readers will be able to navigate the poster more easily.

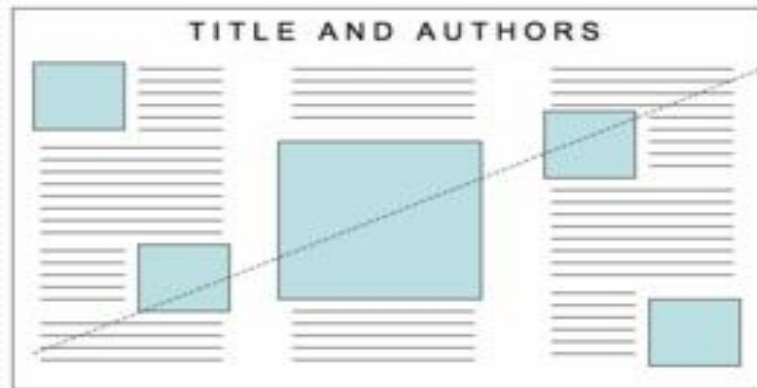
Balance Text, Graphics, and White Space



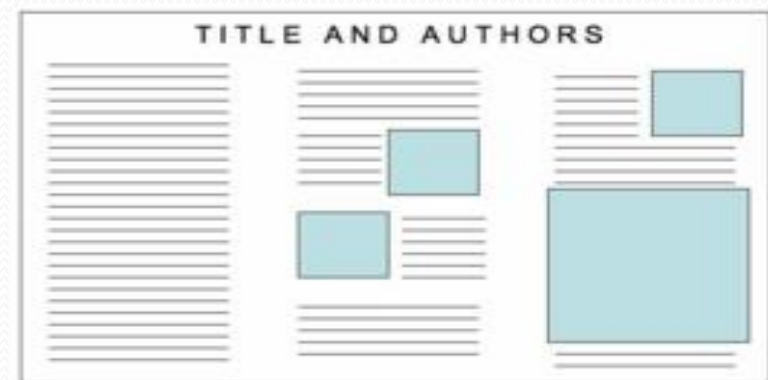
Horizontal Symmetry



Horizontal & Vertical Symmetry



Diagonal Symmetry



Asymmetry
(text-heavy on left, image-heavy on right)

Hess, Tosney, & Liegel (2013) have said “Your poster should have a good **visual balance of figures and text, separated by white space**. Balance occurs when images and text are reflected (at least approximately) across a central horizontal, vertical, or diagonal axis. This axis is known as the axis of symmetry.”

Technical aspects: Layout, **Editing**, and Software

- Editing your text will help you:
 - ❖ fix mistakes and typos
 - ❖ eliminate deadwood to focus on relevant information

So...

Edit, edit ...and edit again!



Technical aspects: Layout, Editing, and Software

- Adobe Illustrator and InDesign are good software applications, which offer many features that provide very professional results, but they are very difficult to learn and more expensive.
- PowerPoint is a relatively easy to use tool and is widely available.
- Excel is a spreadsheet application that can be used to create graphics which you can export into PowerPoint.

References

Hess, G.R., Tosney, K.W. & Liegel, L.H. (2013). Creating effective posters presentations.

<http://www.ncsu.edu/project/posters/TheAuthors.html>



Note

I'd like to thank Professor Susan Imberman. It was from her “Creating a Great Poster Session” presentation in the Faculty Center that I got the idea of using the authors’ content mentioned throughout this presentation to help prepare for the URC. F.C.

Thank you!