4.7 Poster Design

OK. We're coming close to the end of our discussion around design. We've talked a lot about layout, and grid space, and white space, and fonts. A lot of what design is about is trying different things, especially when you're not very experienced with it.

So I'm going to walk you through a design process for a poster. It's a pretend poster. It's nothing-- you know, it's nothing very snazzy. It's nothing-- but it should give you an idea of different ways that you can think about design and layout, and putting it all together as one thing.

So here's my design slide. So we talked about visual hierarchy, where visual hierarchy is communicating what's important. You know, a good title is one of the first things that people are going to pay attention to, and it should give people an idea of what you're thinking about or what your data is about, or what you're trying to communicate to them. So in general, we make a title one of the biggest things on the page.

So in my little example here, I have Big Darned Title, and I have some text up there that's some context text that talks about, you know, what's the basic idea of the story or the data story that I'm going to tell. I've got my name on there. And then I've got some subheadings.

Now, these subheadings-- this visual hierarchy can help communicate a flow of the data. In this case, I've got arrows starting from the top left going down and then going back up and then going down, and that's one flow. Another flow could be from the left to the right, and then below that, from the left to the right, and from below that, the left to the right.

The point here is to think about what it is I might want people to be paying attention to in what order, if order matters. It doesn't always matter. But I can use these subheadings to help communicate that flow, and that can help support a story. Remember, a lot of times in literature, they talk about a story having a beginning, a middle, and an end. So is there a way that you can lay out the poster in such a way that people follow the beginning, the middle, and the end.

Now, I've put on here some suggested font sizes. It's not so much that the font size is that those actual numbers are the end all be all for font size for these different kinds of things, but they're a starting point.

So for title, I have 90 to 200 point font. That's big. 200 point font is big. But if you're building a poster that's three feet by four feet, that can be appropriate. And then of course, that depends on how long your title is. In general, we kind of want titles that are catchy so a poster title that's a few words, three to four or five, is probably better than seven or eight.

Story text, that's that text right below the title, and that's-- I have that set at about 48.5. And that's because, usually, if I step away from my poster and I want people to still get an idea of what the poster is about, that text should do a pretty good job of communicating what the story's about.

It's usually a pretty short section of text. It's a blurb. It's just a little bit of text that helps people get into the story. I might actually have research questions up there too. It depends.

And then from my headings, those are a little bigger than the context text, but not as big as the title, because they're subordinate to the title. The title's about the whole poster. Each subheading is about one part of what I did in my work to build the poster.

And then we have general text and we have sources. Sources, in this case, I'm probably going to have them down in the bottom right, and I'm probably going to have them be the smallest text on the font. I've got about 18 point font listed here. You know, again, that's an about, but in general, you don't want to go lower than 12. If somebody has to squint to read your poster, they might not actually do it. And remember, the point to putting any text on the poster is because you're hoping somebody is going to pay attention to it.

So the next thing about visual hierarchy is that I can use visual elements, like the size of pictures, more or less colorful images. All those things can also come into play to help me communicate what's important about my story.

Now, another thing that we tend to think about when we think about our posters, when we tend to think about this kind of a layout is distance. The distance might be virtual. Like on a web page, we're always at about 18 inches from what we're seeing. But this concept can still help you think about visual hierarchy, and that is that there's three distances.

The first distance are the people standing right next to you. You're talking directly to them when you're explaining your poster. If you've designed your poster in such a way that it has really good composition, then maybe you actually have people standing behind that first row of people waiting their turn to talk to you about their poster. They're kind of like middle distance. And then the last group of people are people across the hall. They're people a long ways away. You know, if you design your poster well, you actually can communicate with all three distances simultaneously.

Your big title at the top of the page is what's communicating to people across the hall, that and maybe some really spiffy visual image or data visualization that can be seen from across the way. The idea there, the overall composition, the title, the spiffy image, those things are designed to bring people from far across the room up to want to see your poster. Color plays a very important role in that.

The middle distance, these are people that they can actually read the title, they can see the big image, they can also read the subheadings. So they have a sense about what your poster's about. If your poster's about climate change, for example, your subheadings probably communicate some of the important findings or some of the things that your work has uncovered. And so these people are kind of reeled in a little bit and they can start to get a sense of what your story's about.

And then the people closest to you at the nearest distance, well, these are the people that you are talking to directly. They can read all the text on the page.

Now remember, you don't want fonts that are too small. You don't want somebody in that first row having to lean over and squint to read your bottom line of text. You want those people to be able to see everything in a comfortable distance. Remember, make it easy for people. The whole point about this kind of design thinking is to make it so your story gets communicated, and the way to do that is to make it easy for people. So those are the three distances, and you can think about those three distances when you're thinking about what's important and what's getting communicated.

Another element of design when thinking about a poster is real estate. Sort of the same way we think about midtown Manhattan is probably more expensive real estate than downtown Syracuse. Where something is important and communicates something all by itself. So you probably don't want the story, the main point of your story being buried way down in the bottom right. In general, in Western cultures, the top right is usually the most expensive real estate, because we tend to read left to right, top to bottom. And people get bored and they might walk away, so you want to capture their attention with what's important in the top left corner.

Another way to think about this is, what's the one big takeaway? You know, you're a company and you're pitching a new park in some downtown area, in some city. What's the big thing that you want the people that you're trying to sell the idea to to take away? What do you want them to remember? Oftentimes, we want to put that firmly in the top left.

Now, when you're designing, one of the things you want to think about is, how do I draw people in? How do I engage people?

I don't know if you've noticed, but in the information age, there's a constant cacophony of input trying to get your attention. Well, we kind of have to play that game a little bit here too. So we want to think about easy entry points, things that are going to draw people in. These tend to be things like pictures or plots.

Contrast, we talked a lot about contrast earlier. Contrast is going to draw people in. So the colors that you choose that have contrast, without going overboard, are going to help bring people in.

And then, believe it or not, circles. Circles tend to bring people in more than boxes.

So in this example here of the poster at this point, I've added a map that has contrast that you can see from far away, because it takes up a lot of real estate. But I've also added a process diagram, which is a set of circles that has arrows connecting them. And then down at the bottom, I've got plots. Now, this poster is a fictional poster, but I'm using the plots and the images in such a way that hopefully it can draw people in at all three distances.

I'm also using a very restrained and consistent color scheme. Everything here is orange or blue. The ocean of the map is blue. The blue contrasts with orange, in fact, they're in perfect contrast. And so that's what I'm hoping will draw people's attention from across the room.

Just like there are entry points to your poster, entry points to bringing people in, there's also barriers. Text is one of the biggest barriers. If you're standing there next to your poster and you have a lot of text on your poster, people are going to be thinking, well, should I'd be reading the text or should I be listening to the person. In fact, when you're designing slides for presentations, lots of texts makes people space out, because they're cognitively trying to figure out whether they should be reading the text or paying attention to you.

So what you want to do is be as light on the text as possible. Instead of using text, can you get away with bullet points, for example. Tables also tend to be pretty awful for us to parse, to cognitively make sense of. Sometimes they're necessary, and they're better than text, but tables can cause problems for people too.

One of the big ones is unnecessary clutter. In some of the bad design examples I showed you, there was just so much on the page. It was a cacophony, it was noise. It was hard to make sense of.

And then the other thing that actually can detract from what you're trying to communicate and make it so people walk away instead of walk toward you is low quality images. We talked quite a while ago about raster versus vector images. If you find a raster clip art that you want to use as a background and you stretch it to make it big so that it makes a nice background for the poster, chances are it's going to pixelate. It's going to look terrible. And that's actually going to distract people from paying attention to your topic.

You want to minimize those kinds of distractions. So always use vector images. You can often find all sorts of different kinds of vector images on the web, and then you can import those into Adobe Illustrator and incorporate those into your design. But avoid raster images.

Specifically about text, try to keep it simple. If you use jargon, you're going to lose people and they're going to walk away.

Less text is more. This is like zen. Be simple.

Again, use bullet points instead of text wherever possible. Avoid full sentences, use bullets. Sometimes you want to use full sentences, and in fact, a lot of times questions are actually important.

Questions actually are one of those things that invite people to engage. If you've ever read much about click bait, websites use question marks as a way to draw people to get them to click on links that they might not otherwise click on. I'm not actually advocating using click bait, but a lot of times, questions do really engage people.

And then there is a effect. You know, we can use bold text and we can use italics to help emphasize some things, but those things can also become noise on a page if they're overused. So you want to be cautious.

And then again, it's all about contrast. If you're using a light blue font on a green background, people aren't going to read the text. There's not going to be enough contrast. So you want to think about having enough contrast to really get people to pay attention.

So some final words about your poster design. It turns out there really isn't a right answer. There isn't a perfect design.

Design depends a lot on the context and what you're trying to communicate. Just like I said a while back about fonts and picking a font that actually reflects the meaning in the text, you can actually design a poster that reflects the meaning of your data. But there isn't a perfect right answer, and in fact, the choices are infinite. There are so many fonts you could choose from, so many different layouts, so many visualizations that what you want to do is you actually kind of want to work iteratively and try different things.

The examples that I've been showing you so far have been in portrait mode, but here I'm showing you a landscape mode of a poster. I have a few different fonts for the title, but what I did was I tried different layouts. I tried portrait, I tried landscape. I tried different things until I came up with something that I thought, hey, this is kind of cool.

And you can see that I've got a good solid grid layout here. I've-- you know, all of my bars in my subheadings along the top, under the title, they're all in alignment. There's three clear columns, with one of the columns being larger than the others. I break the rules over on the bottom left a little bit, showing future work, but by and large, this sticks to a really good grid.

Now, if you're creating posters for educational settings or for business settings, then do you want to use a logo? Yeah. Actually, a logo can help communicate kind of the ownership of the ideas. And you definitely want your name and other identifiers on a poster.

One of the last things I want you to take away from this is that the poster is actually about you. The design should be invisible. Depending on the setting, unless it's specifically about design, you don't actually want people complimenting your design. The design should be invisible. They should just be looking at your poster and thinking it's cool, and saying, you know, like, so what's this about?

So the poster is an opportunity for you to communicate your work to other people or your company's work. Or it's an opportunity to communicate what's in the data. But the design, in general, people shouldn't be paying attention to, and they'll pay attention to it when things don't work, when there's too many fonts, when there's a cacophony of noise. They'll pay attention to it when things don't line up.