## Creating an effective poster

john wilkes

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I see a lot of bad posters at conferences. That's a pity, because it means that the work is difficult to understand, and may even be ignored - I tend to skip posters that look like they are going to be hard work. But with a few simple tricks, you can change this around and make a poster that grabs your audience's attention right away. Result: you'll have much more interesting conversations, and more of them.

Use fewer words than you think. (Typically, by about a factor of 10.)

- It should be possible to read *everything* on the poster from 3m away without squinting. That includes graph axes/labels.
- A poster is not an essay, and nor is it a set of slides posted to a board. If you're doing one of these, start over.
- Nobody has the patience to read complex equations or pseudocode: just skip them.
- Provide a short URL for more info, and put references and all the subtle stuff there.

Describe the *problem* before you explain anything else. Tip: read Kent Beck's <u>4 sentence</u> <u>abstract</u>.

- Really: what problem are you trying to address? State this as explicitly as you
  possibly can.<sup>1</sup>
- A problem is something that's bad, or a nuisance, or a barrier, or an impediment.
- A problem is not a solution, or a desire, or a goal you are trying to achieve. No problem starts with "we want" that's a goal.
- Your goal is for the audience to say "hey that's a great solution to that problem!"

Motivate the problem: why should the reader care about it?

- No, really: why? Does it waste money? Lose lives? Stop people doing something they need to do?
- "We built a better frombler" is of no interest to anybody until they know why fromblers need to be better, and what would happen if they weren't.

Clearly and explicitly state what the main idea/insight is.

- It should be obvious from a quick glance what the most important takeaway is.
- Don't make people work out what it must be: tell them!
- "If you can't express an idea clearly, you probably haven't got it". If this happens, stop and work out what it is you are really trying to convey.

Have a story your audience will want to hear.

• Start with the problem, and why it matters; describe your solution (existing or proposed), and (hopefully) show that your solution addresses the problem. (Take a look at my intro paragraph for an example.)

<sup>&</sup>lt;sup>1</sup> As Leslie Lamport <u>put it</u>: "I am ignoring as unworthy of consideration the disturbingly large number of papers that never even attempt a precise statement of what problem they are solving".

- Be ruthless in making the story address what *the audience* might need, not what you want to tell them.
- Practice telling this story aim to do it in under 1 minute, with a 3-minute backup version for people who get excited by the short version.

Of all these, the single hardest thing to get right is the problem statement. Despite what others may have suggested, defining the precise problem you are solving is really hard. One tip: your solution should completely solve the problem -- all of it, not just a faintly-related sub-part. If it can't, then your problem statement is too broad.

## The biggest failures I see are:

- 1. skipping the problem entirely, and starting with a solution or a goal, or "motivation";
- 2. making the problem too broad or too vague ("the internet is too slow");
- 3. having a distracting setup (e.g., an introduction to the area): get right to the problem, in the very first bullet of your poster.

A poster is a tool to trigger a conversation in which you can explain how you are making the world a better place. That won't happen if somebody needs to read pages of text, or if there's no meat to the poster. I just skip past such posters. A "teaser" poster that cannot be understood without help doesn't usually work well: you can't always be standing next to it, or might be talking with somebody else.

Put a short URL on your poster so that people can get more information - or a QR code.

An ideal interaction would be for somebody to walk up to your poster, say "give me a minute to read it", and have them understand enough that they will want to ask you to explain the details of your approach. Everything else they'll have got from the poster: they'll understand what the problem is, and so how to assess your results. They'll agree the problem matters, and be motivated to know more. And off you'll go. The rest is up to you.

Good luck!