Instantly Better Presentations
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Talk about what you know and love

- Talk about topics you genuinely understand, about techniques you actually use, and about experience you've really had
- If you're not familiar with the subject...ask yourself:
  - Why are you speaking about a topic you don't know?
  - In what way are you qualified to discuss it?
  - How can your presentation possibly help your audience?
- Knowing you know the material is also an essential key to confidence when you're presenting it
- However…while good knowledge and understanding of the topic is essential, it isn't sufficient
- Communication is an emotional act, as well as a rational one
- The emotional aspect is what creates the attention and motivation and connection by which information can pass from speaker to listener
- You don't have to be "emo" about it; you just have to be talking about something you're genuinely passionate about (either *pro* or *con*)
- Often that means you have to find a way to care about the topic you're supposed to talk about, or required to talk about…to find an "angle" that's interesting to *you*
- It doesn't matter how knowledgeable, eloquent, or polished you are, if you're also dull and lifeless
- After all, if even you (the speaker) find your topic boring, how can the audience hope to sustain any interest in it?
- Great speakers inject their own enthusiasm into a topic, and project that energy out into the room

Tell a story

- As a presenter, you have to contend with the 7±2 limitation on human short-term memory

- Even a little too much information will totally overwhelm your audience

- In computing terms, humans have been struggling against internal "register shortage" since before they were even human

- Our commonest solution is to structure information hierarchically ...and our oldest tool for doing that is the story

- Stories provide an intrinsic flow and logical development that makes it easier to acquire and assimilate knowledge, and that helps subsequent recall it later by providing structural cues

- Most stories also have a useful hierarchical arrangement, which helps listeners understand, abstract, and categorize the relationships between components of the narrative

- So a presentation will be more comprehensible and memorable and comfortable if it feels in some way like a story

- You can structure a talk historically, or illuminate concepts via narratives, or offer story-like examples (anecdotes)

- Typical story structures for presentations include:

> 1. *Amusing prehistoric approaches*
> 2. *Serious, but incomplete, attempt(s)*
> 3. *A modern comprehensive solution*
> 4. *Things get even more complex*
> 5. *How it stands at the moment*

> 1. *The problem*
> 2. *The current solution*
> 3. *The problem with the current solution*
> 4. *The proposed solution*
> 5. *How we plan to get there*

> 1. *What I wanted to achieve*
> 2. *What I planned to do*
> 3. *What I actually did (and why)*
> 4. *What happened when I did it*
> 5. *What I should have done instead*

Select your content inductively

- If your material is to make sense and be presented in a logical sequence, in language that your audience will understand, using metaphors they'll appreciate, with visuals that assist your listeners instead of confusing them...all of that has to be arranged *beforehand*

- Content has to be chosen, then verified, then orchestrated into a comprehensible sequence

- To produce really top-class presentations, budget at least ten to twenty hours
  per hour of speaking

- The first task is to select what to say, and how to say it

- Most people approach this problem deductively, starting with: *What <u>should</u> I say?*

- A much better approach is to solve it inductively, by beginning with: *What <u>could</u> I say?*

- That is: work from your strength at *recognizing* what's important,
  rather than from your limited ability to *recall* what's important

- Start off by noting down everything you think you might possibly ever want to say on the topic

- Don't worry about evaluating it or selecting from it or even organizing it;
  just let it flow out naturally, in a stream of consciousness

- What you're actually doing here is a random-walk traversal of the graph
  of your own internal cognitive structures for the material

- Now select about five (but no more than seven) of these points, choosing the points that best represent ideas that you find you want to communicate

- These five points will become the five "chapters" of your presentation's story

- Next, find a narrative structure into which these five points fit comfortably;
  if necessary, replace some of the five points to make your selections fit your
  chosen narrative structure better

- Then group everything else you wrote down under those five "headings"

- Throw away any ideas that don't fit (no matter how interesting or significant those ideas seem)

- Finally, look for parts of the narrative where the flow of ideas is interrupted, where the leap from one idea to the next is just too great, or places where some essential point that will be needed later in the presentation is missing…and fill in those gaps

- Using a story structure provides an single overriding organizing mechanism, and ensures a logical and comprehensible flow in the material

- A story structure also provides a means of working out what unnecessary material to omit,
  it highlights where essential material is currently missing, and it even indicates where that
  missing material should be inserted

Declutter your visuals

- Almost every slide you see in any presentation is too busy: there will be too much text, or too many ideas, or too many fonts, or too many images

- Which adds up to: too much distraction

- Complexity is also harder to trust, to believe, to accept (read up on "Cognitive Fluency")

- To reduce this "noise", your guiding principle should be: *When in doubt...cut it out!*

- If you're using bullet points, each slide should have no more than five bullet points (and just two or three is *much* better)

- An individual bullet should consist of no more than two lines (and rarely even two lines…ideally bullets should be no longer than five words)

- But also consider the single-word Takahashi style, with each bullet point being converted to a single word (or short phrase), one per slide

- Keep in mind that, even if you're using text-based slides, a single image or animation can often replace a dozen slides, and still do a better job of conveying your meaning

Minimize your slide template

- Keep slide decorations to a minimum (preferably to a minimum of zero!)

- Use about 80% of the available screen space, but don't cram too much in to each page: leave visual "breathing room" around the edges of the text area

- Choose a sufficiently large font size that limits you to about five bullet points (maximum seven lines of text, plus four inter-point gaps)

- Don't mix your media: each slide should be a slide of just points, or a slide of just code, or just a diagram, or just an image, or just a summary statement; don't create slides with points and code and an image all jumbled together

Pare your charts and graphs

- *"Show a chart...lose an audience"*

- It will inevitably contain too much information; information that is better conveyed in other ways (on a webpage, in printed notes, as a reference to your source material)

- If you have to show a chart, show it quickly as an overview, then zoom in or out to show only the relevant details of it

- No-one understands most graphs either; again, because most of them show far too much information at once

- If necessary, show just a few trend lines and include the full graph, or a table of the data, either on-line or in a printed handout

Highlight differences temporally

- Most people are better at "blink comparison" than at side-by-side comparison; we see dynamic changes more easily than static differences

- So when you have to show *"this...instead of that..."* or before-and-after examples, show one, then make a quick and simple transition to the other

- The essential point is to make sure the bits that aren't important or relevant are carefully aligned, so that they don't change between the slides

- Aligning code from slide to slide is particularly frequently neglected, and produces a very annoying "jumping code" effect that makes it much harder to the audience to follow what is being shown: if everything moves between slides, then everything seems equally (un)important

- When explaining code, keep the code in a single location and change the highlighting to help the audience focus on the part of the code you're currently discussing

- Moving to a second slide that nearly replicates the previous one can also be a useful way of giving the audience x-ray vision (to understand what's happening "underneath"), or to allow them to follow "foreign texts" (via in-place translation)

- You can also animate code transformations (refactorings, optimizations, reorderings, *etc.*) to demonstrate the process of code design and restructuring

Use fonts intentionally

- Give each font you use a meaning, and don't use an extra font unless you genuinely need to make a distinction

- Have a consistent font scheme; for example:
  - Sans serif for headings and decorations
  - A classic serif for content
  - Classic fixed width for code
  - Modern fixed width for terminal interactions

- Stylish sans-serif fonts include:

Lucida Grande:	Sphinx of black quartz: judge my vow
Gill Sans:	Sphinx of black quartz: judge my vow
Myriad:	Sphinx of black quartz: judge my vow
Helvetica:	Sphinx of black quartz: judge my vow

- Elegant serif fonts include:

Georgia:	The five boxing wizards jump quickly
Caslon:	The five boxing wizards jump quickly
Garamond:	The five boxing wizards jump quickly
Minion:	The five boxing wizards jump quickly
Times New Roman:	The five boxing wizards jump quickly
Times:	The five boxing wizards jump quickly

- Classic fixed-width fonts include:

`Monaco:`	`Quick zephyrs blow, vexing daft Jim`
`Vera Sans Mono:`	`Quick zephyrs blow, vexing daft Jim`
`Lucida Sans Typewriter:`	`Quick zephyrs blow, vexing daft Jim`
`Anonymous:`	`Quick zephyrs blow, vexing daft Jim`
`Courier:`	`Quick zephyrs blow, vexing daft Jim`

- Reserve special purpose fonts for special purposes, such as indicating literal conversation
- Use special fonts as if they were artwork, and to make a specific point, or to engender a specific mood

Use your nervousness

- If you are properly prepared and rehearsed, and speaking on a topic that you know and love, you may well find that your usual nervousness is considerably diminished…simply because you are more confident that you are going to do well
- To overcome stage nerves, you need to mentally convert standing in front of an audience from a rare occurrence into a normal activity
- You can trick your brain into tuning out the glaring horde in front of you by rehearsing in front of a "virtual crowd": a full-screen image of an audience
- You also need to practice mentally relabelling your "nerves" as a positive by telling yourself:
  "This is not fear, this is energy; this is not anxiety, this is excitement…that I can channel into my speech!"
- And in that vein...talk to audience members beforehand (about *them!*)
- Make a connection there and the room will no longer be full of complete strangers
- Chatting beforehand can also give you an idea of their level of knowledge, which makes it easier to pitch the talk at the right depth

Rehearse

- Never give a presentation for the first time: make sure you've rehearsed it at least three times before a real audience sees it
- Practice it as close as possible to the way you will actually give it: standing, speaking aloud, timing yourself to be sure you're within the allotted time, and to some kind of audience
  (a pet or an image is fine)
- Aim to rehearse for an allocated time about 10% shorter than you actually have; this will give you some spare time for the unexpected (interruptions, extra questions, problems with equipment, *etc*.) in the real presentation
- Use your rehearsals to fine-tune the length and content of your presentation: practise…time…trim-or-extend…re-practise…re-time…re-adjust…
- As you rehearse, work out your "milestones": where in the presentation you need to be after one-quarter, one-half, three-quarters of the available time
- Remember these milestones and track them during the actual presentation
  to help you adjust your pace and finish on time
- Mark sure you can see a clock or timer in order to monitor your pace: a small time display right next to your monitor or your notes is the best solution; constantly glancing up at a clock on the wall sends your audience entirely the wrong message

Invite questions, but manage them

- Questions are vital if the audience is truly to understand your ideas
- After all, interaction with the audience is the whole point of *having* an audience
- But, unless questions are planned for, and incorporated smoothly into your delivery,
  they can severely interrupt the flow of a presentation and blunt the effect of your
  careful preparations
- So decide how – and when – you want to take questions...and tell your audience
  during your introductory remarks:
  - *"I'm keen to take questions, but as we have a great deal to cover in a limited time,
    I'd ask that you hold your questions until the until end of the talk."*
  - *"I'm keen to take questions, but as we have a great deal to cover in a limited time,
    I'd prefer to take them at the end of each section of the talk. I'll let you know when."*
  - *"I'm keen to take questions, and I'd encourage you to ask them at any time."*
  - *"I'm keen to take questions, but I'm afraid that we simply won't have time.
    So I'd be delighted to answer any questions out in the foyer afterwards."*
- Always be keen to take questions (whether or not you really are keen to take them
  and whether or not you do actually take them at all)
- Being keen to take questions shows the audience that you want to communicate with them, rather than just talk at them, and also reassures them that you value their viewpoints and insights

To speak well, speak often

- Speaking publicly is like so many other activities when you're first learning:
  it feels like there are simply too many separate things to remember simultaneously

- The feeling is akin to when you were first learning to drive, or to use a computer, or to ski,
  or to juggle

- And just as with those activities, the only way to speak better is to speak...and speak...
  and speak some more

- As you do, you'll discover what works for you and what doesn't

- The more you practice, the more familiar you'll be become with the experience,
  and process, and mechanics, and the art…of speaking

- And more familiar with the way it *feels* to be in front of an crowd and to speak well

- That familiarity will reduce your nervousness, and enable you to appreciate,
  and enjoy, and connect with your audience

- And, eventually, practice will enable you to let go of your anxieties, of your self-consciousness, and
  ultimately even of your self-awareness...until there is just the "flow" of speaking

Presentation checklist

- When choosing your topic: *Why do I care about this topic?*
- When choosing material: *What could I say?*
- When organizing your material: *What's my story here?*
- For each slide: *What can I remove?*
- For each visual element: *Is this item helping me communicate…or is it just clutter?*
- For each demonstration: *How do I break this idea/code/process into simple steps I can animate?*
- Within each demonstration: *How can I ensure only the meaningful components move/change?*
- When you feel anxious: *How can I reinterpret what these feelings mean to me?*