

# How to Present

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Closely based on Jean-Luc Doumont's lecture on presentations. The talk is not available online, but his talk on [designing slides](#) are on youtube. My original notes (in Chinese) can be found [here](#).

Alan was an active member of a theater club in Leuven. He was also one of the best presenters in COSIC.

I delivered 50 presentations during my Ph.D\@. Twenty-four in 2018 and 2019---of which 21 are formal, which lead to my 700+ followers on twitter.

But according to my wife, I am a terrible presenter (and I agree). Why? I'll tell you my weaknesses later.

After today's talk, you should be able to

- tell a good presentation from a bad one and why
- know what to do first when you have limited time to prepare for a presentation
- deliver a good presentation in public

Disclaimer: this pre is not a good example. It is not formal anyways.

## Purpose of Communication

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Get your audience to

- pay attention to,
- understand,
- (be able to) act upon

a maximum messages, given constraints.

To further simplify it, the goal is  $\max\{\text{msgs\_audience\_rcvd}\}$ .

### Rule #0: Have a Message

Msg is the interpretation of information: so what, who cares. To our memory, information can only be stored with a msg.

### Rule #1: Focus on the Message

What should you do when you have twenty remaining slides to present, but only two minutes?

### Rule #2: Message not Received is a Waste of Time

Pre at school is a different thing.

As soon as you graduate, nobody cares how much you did/know. People care about how much they can gain.

Questions from the audience are usually a sign of "msg received".

## Three Laws of Communication

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1. Adapt to your audience

- 2. Maximize the signal-to-noise ratio
- 3. Use effective redundancy

Elaborate on 1: not the other way around.

Elaborate on 2: what is noise?

- everything on the slides that are unrelated to the msg
- animation on the slides other than "appear"
- every body movement or sound you make that are unrelated to the msg

To avoid unnecessary body movement:

- bring a remote&pointer yourself (at least install a remote control app on your smart phone)
- confirm whether you can use a pointer; if not, edit the slides
- get to the room early, know where to stand so that
  - you can look at the audience and a screen at the same time, move the table or get extra cables if necessary
  - your body does not block the big screen
- know what kind of mic to use, check it

Elaborate on 3:

The main points should be understandable by only reading the slides---but the details needn't; no msgs should be lost without the slides.

What to repeat?

## The Structure of a Presentation

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A typical bad opening:

- Greeting
- Introduce myself
- Read the outline on the slides word-by-word

Why shouldn't you introduce yourself?

- The presentation is about the msgs, not about you
- The audience will not remember your name anyways
- If they truly are interested, they have plenty of channels to look up

The recommended structure:

Attention getter

Need

Task

Main message

Preview

A way to lead the audience to the need efficiently

A difference between actual and desired situations

What I decided/was asked to do to address the need

The one sentence I want my audience to remember

A map of the body (ideally three points, max. five)

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Point 1

Transition

Point 2

Transition

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Review

Conclusion

Close

A recap of the body, leading into the conclusion

What the above means to the audience in the end

A way to end the presentation clearly and elegantly

## Attention Getter

A.k.a., hook:

- Ask a question that they care about
- Throw a shocking counterintuitive fact
- Tell a story
- "I am gonna show you [why you will feel happy/successful/free after my pre]"

Try to give two or three hooks! Three is the best.

## Need

Why do I do this?

## Task

What I did. You can give your credentials here.

## Main Message

In one sentence.

## Preview

About the body, not about what you've talked about.

## Transition

The logical relations that connect all your points.

## Review

The one thing you cannot omit.

## Conclusion

Remember the ripple metaphor. I stressed it enough during the academic writing lectures.

## Close

We don't want asynchronous applause. Give a clear signal that you are done.

Do not thank your audience. They should thank you for giving this wonderful pre.

The correct way: revisit your attention getter.

## Engage Your Audience

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Three kinds of things can engage your audience:

- Entertain
- Feel good
- Insights

People's attention span is 20 sec during entertainment; 2 min in business/academic talk. Use one of the three every two minutes!

Don't deliver >50% insights.

## What to Put on the Slides

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### The Most Common Mistake

Too much text.

- Don't use your slides as a teleprompter
- Do you repeat your paper
- Do not copy-paste from your paper

The punchlines and transition questions are ruined if you put everything on the slides.

What to do when you don't have enough time to make slides?

Do not copy-paste old slides!

Msgs -> Structure -> Practice [-> Handout (1 page)]

Bullet points are usually used to summarize insights/msgs.

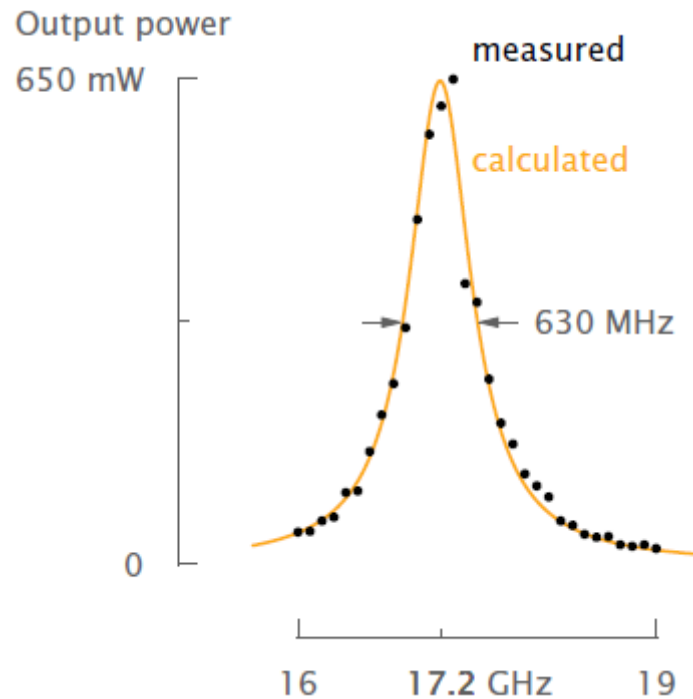
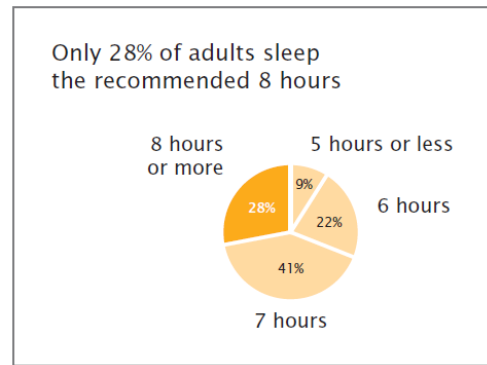
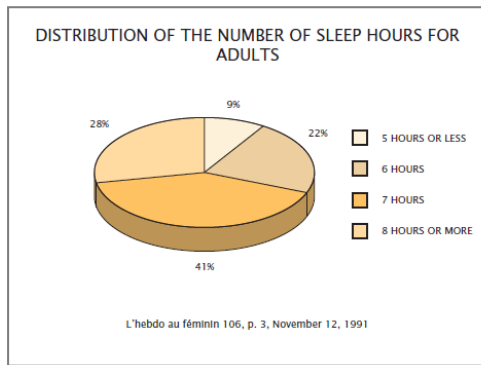
- Ideally one line, no more than two lines
- Same grammarly structure (so this is a bad example)
- No punctuation at the end (unlike writing papers)

### One Message per Slide

First decide the structure, then make the slides.

## Figures

Delete all the elements that can be deleted.



- Display at most three numbers on an axis, no more
- No vertical text
- The legend should be close to the data
- The vertical axis doesn't have to be on the left

## Layout

Use your msg as the title. At most two lines, 15 words. Choose line break properly.

Align your content to the same top-left corner point.

If some slides' main content is text (e.g., bullet points), most of them should have the same font size.

## Three Questions for Every Slide

1. What is my msg?
2. Is it visually presented?
3. Is the msg free of noise?

When you think you can't convey it visually, ask yourself, is it because my content really is that special, or I am too lazy to think? The equation example:

$$E = \sum_i (p_i \times x_i)$$

Expected gain
The value we could get

The probability that we will get it

Convey things visually (possibly in a figure):

- Different formats means different items types, and vice versa. Common mistakes of "different formats":
  - Some functions use verbs as their names, the others use nouns
  - some names take one line, some takes two
  - for text of multiple lines, some are left aligned, some are center aligned
  - different font, or different size
- If some items are logically grouped, they should be visually grouped, and vice versa

## Practice

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A 20-min conference pre takes 4 full working days to prepare:

- one day for the structure, msgs and the content of the slides
- half a day to one day to polish the slides
- the rest to practice

A presentation is the moment to claim your rewards. You blow several months, perhaps years, of hard work if you blow a pre. There is nothing more important in work than delivering a pre.

Remember your outline. Remember how many sentences you need to say in each slides. Remember which sentences to slow down.

My rule of thumb:

- Time yourself six times---can be done on the plane/train
- Ask someone to listen and give feedback
- Record several slides and play back to yourself

Practice at least once without the slides.

BTW, for our weekly meeting, I expect the following "importance ranking"

1. The conversation and its context
2. The main message and its implications
3. A clear and easy-to-follow structure, so that you know how long it takes (ideally no more than 30 minutes)
4. The speaker understands all the technical details (so he/she can answer questions)
5. Adequate visual aid for the main structure

## Multi-channel Delivering

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### Verbal

Remove "you know, errrr, I mean". Think quietly.

Recite your outline, then "how many sentences per slide".

## Vocal

Common problem:

- Speaking too fast
- Speaking with too many ups and downs

Solution:

- Explicitly remember which sentences to slow down
- Explicitly remember the key word/phrase of a sentence

## Visual

Look at your audience most of the time.

Always spread your shoulders.

Don't put your weight on one leg.

Don't move unless necessary.

Step forward if you want the audience to look at you; step backward if you want them to look at the screen.

## Dealing with Nervousness

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Never tell the audience you are nervous. It is fine if they can see it, but very unprofessional to mention it.

- Before: eliminate the unknown
- During: focus on what you can do
- At all time: see yourself succeeding

How to eliminate the unknown?

- Recite your content
- Get familiar with the room
- Talk to your audience