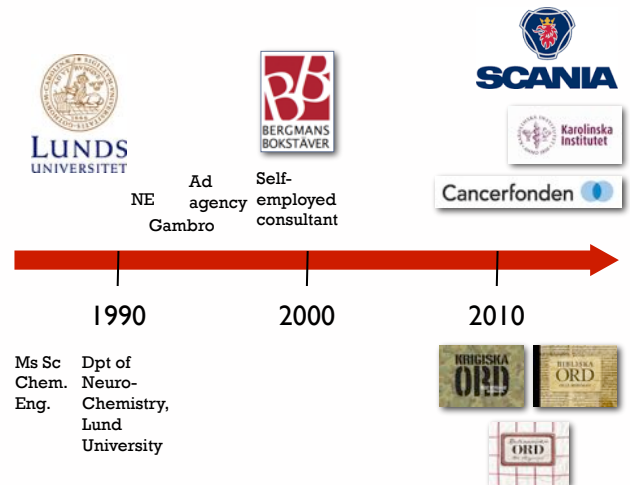


# Presentation techniques & PowerPoint

Solna, 13 juni, 2019


## Olle Bergman

M.Sc. Chemical Engineering  
“Communications Consultant,  
Public Speaker & Professional  
Writer with a passion for  
people, science, language &  
history.”



3 weaknesses  
of scientific communication



- 
1. Poor emotional engagement.
  2. Strong, yet dysfunctional conventions.
  3. Widespread DIY culture.

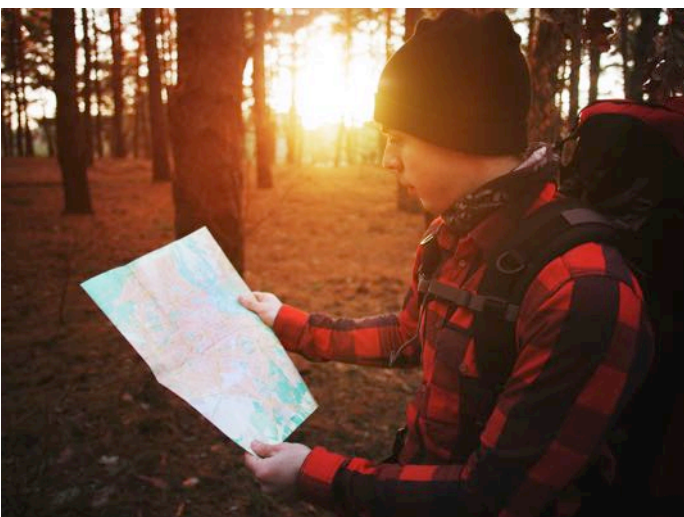
## Basic principles of communication

*§ why rhetoric is still relevant in AD 2015*

**1**  
Define  
your task.

**Microsoft®**

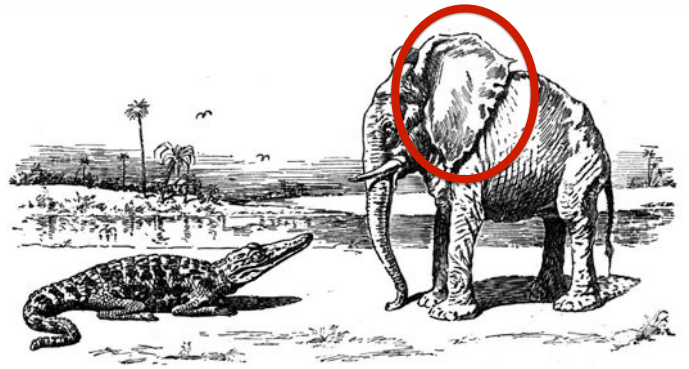
WHERE DO YOU WANT TO GO TODAY?™



- ▶ Transfer information?
- ▶ Create understanding?
- ▶ Convince opponent?
- ▶ Sell an idea or a product?
- ▶ Influence decisions?
- ▶ **CHANGE THE WORLD!!**

Analyze your  
target group.

2



What ...

- ▶ ... do they know?
- ▶ ... do they want?
- ▶ ... do they need?
- ▶ ... motivates them?



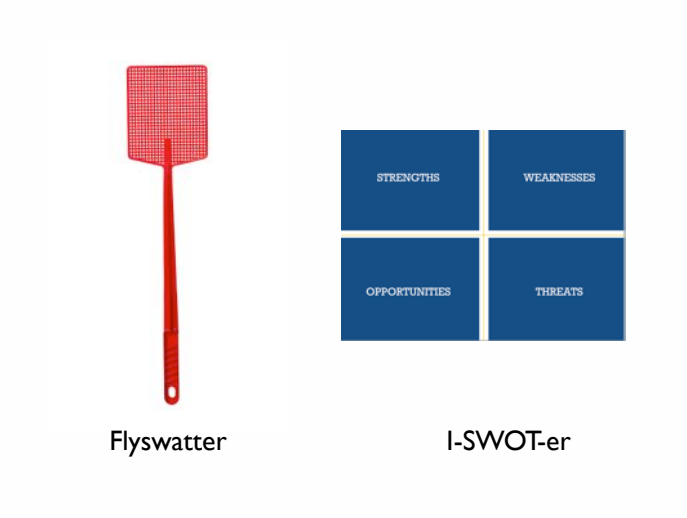
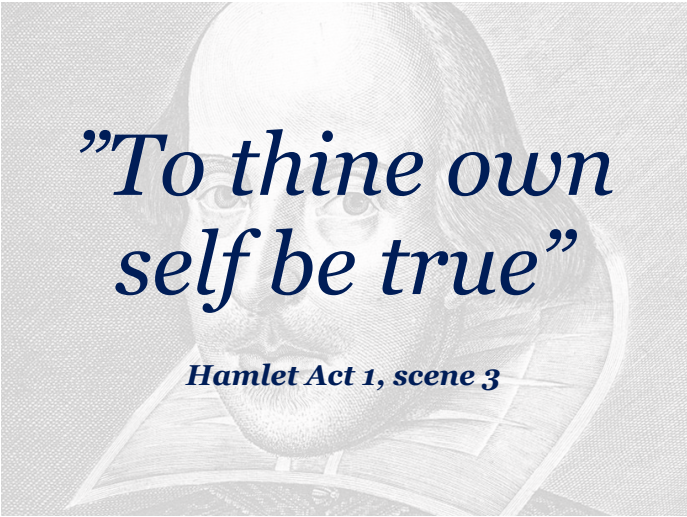
Australopithecus afarensis

HOMEOSTASIS  
SECURITY  
HIERARCHY  
REPRODUCTION

What ...

- ▶ ... do they think they know?
- ▶ ... do they want to be?
- ▶ ... makes them feel insecure?
- ▶ ... boosts their ego?





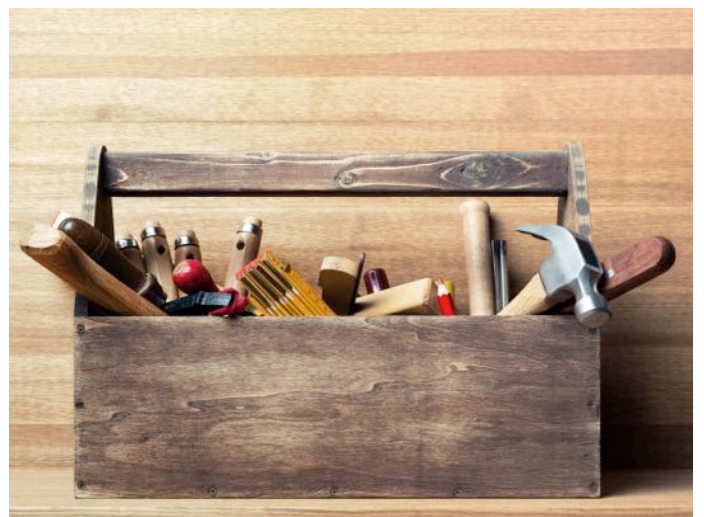


# Passion

Understand  
the limitations  
at hand.



Seek inspiration  
in all types of  
communication.

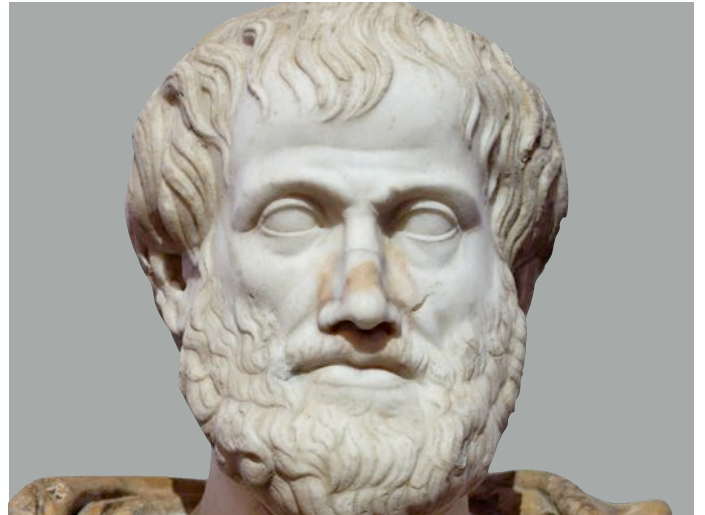




# RHETORIC

- |                     |                       |
|---------------------|-----------------------|
| ▶ <i>Exordium</i>   | ▶ <i>Introduction</i> |
| ▶ <i>Narratio</i>   | ▶ <i>Background</i>   |
| ▶ <i>Propositio</i> | ▶ <i>Thesis</i>       |
| ▶ <i>Probatio</i>   | ▶ <i>Proof</i>        |
| ▶ <i>Refutatio</i>  | ▶ <i>Refutation</i>   |
| ▶ <i>Peroratio</i>  | ▶ <i>Conclusion</i>   |

- ▶ Title
- ▶ (Abstract)
- ▶ Introduction
- ▶ Materials & Methods
- ▶ Results
- ▶ Conclusions
- ▶ References
- ▶ Acknowledgements



ETHOS  
PATHOS  
LOGOS

ETHOS



PATHOS

LOGOS

*Marketing*

**A**ttention

**I**nterest

**D**esire

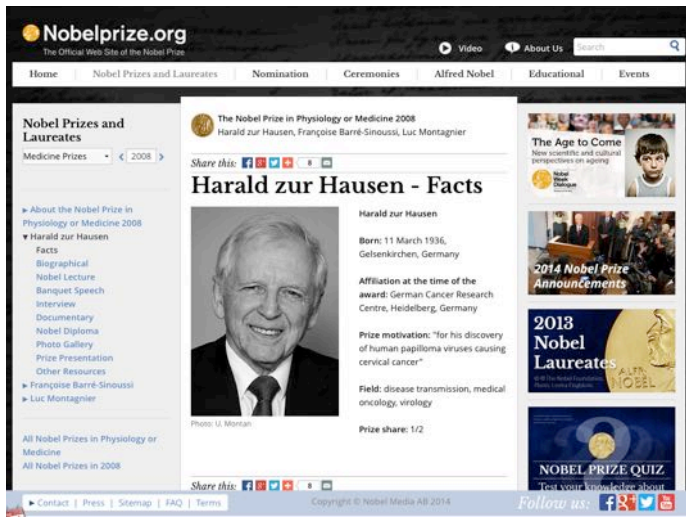
**A**ction



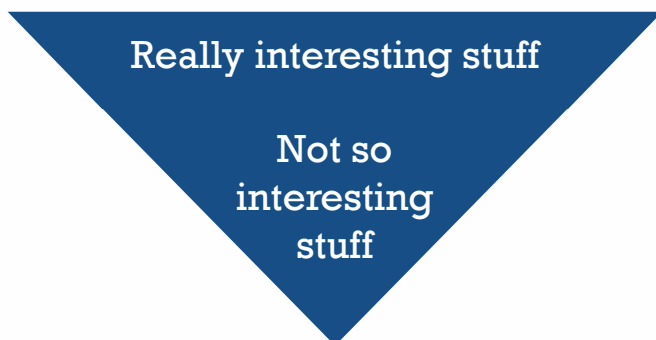
*Storytelling*







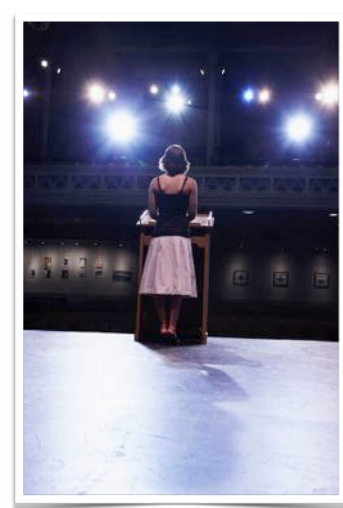
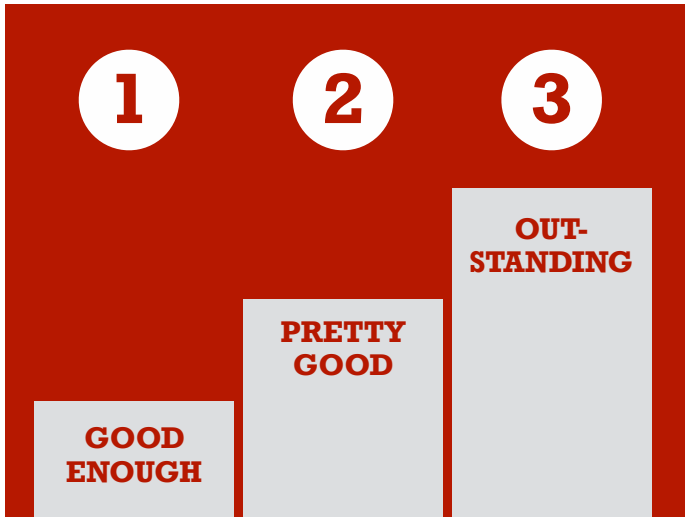
## The inverted pyramid

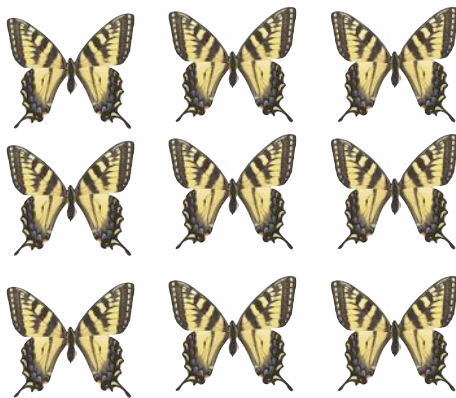


- ▶ What?      ▶ Who?
- ▶ When?    ▶ Why?
- ▶ Where?   ▶ How?

1. Define your task.
2. Analyze your target group.
3. Know yourself
4. Understand the limitations at hand.
5. Seek inspiration in all

The noble art of  
public speaking  
*& why nervousness is not the main issue*





LEVEL

2

Pretty good

- Define your main messages.
- Follow a preparation protocol.
- Practice.

3



# THE FIVE CANONS OF RHETORIC

ACTIO

MEMORIA

ELOCUTIO

DISPOSITIO

INVENTIO



## Task

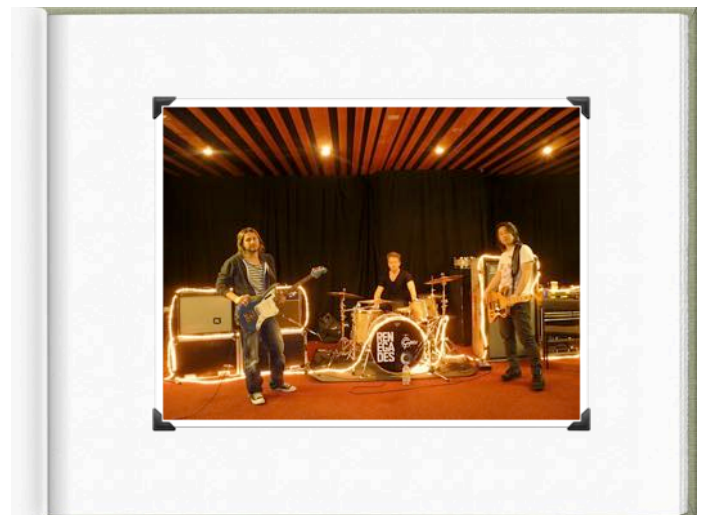
1. Analyze the task.
2. Define your goal.
3. Pick your messages.

## Content

4. Decide a strategy.
5. Compile your material.
6. Structure & simplify.

## Delivery

8. Plan the delivery.
9. Try out and practice



- Goal?
- Main message?
- Target group?
  - a). How create confidence?
  - b). How inspire them?
  - c). Facts, feelings or trust?
- Type of presentation?
- Content?
  - a). What to include?
  - b). How to structure it?
  - c). How to show it?
- Any gimmick?
- How interact?
- How start and finish?

LEVEL

3

Outstanding

- Refine the delivery.
- Use humor & the toolbox of rhetorics.
- Build practical experience.



Project your  
enthusiasm  
towards the  
listeners.

Use your eyes.

Ask things.

Change  
the pace &  
take breaks.

# Be silent.

(Use the “B” key)

# Use the space



## CHECKLISTS

### WHEN LEAVING YOUR OFFICE

- Slides?
- Props?
- Speaker notes?
- Handouts?
- Cables & connectors?
- Remote control?

### WHEN ARRIVING AT THE VENUE

- Observe how other speakers do.
- Study light & sound systems closely.
- Say hello to the technician.

## BOARDING CARD

— when you enter the stage

### TO TELL YOURSELF

- I am well-prepared.
- I look confident!
- This will be fun!

### TO REMEMBER

- There is a main message to deliver.
- Perfection is dull.
- There are nice people out there who are open for communication.

PS: Buy a remote control!

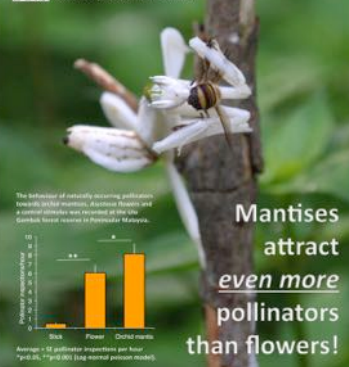
# SCIENTIFIC POSTERS

*and what their actual purpose is*

## Does the orchid mantis deceive pollinators?



James C. O'Hanlon<sup>1</sup>, Gregory I. Holwell<sup>1</sup>, Marie E. Herberstein<sup>1</sup>  
<sup>1</sup>Department of Biological Sciences, Monash University  
<sup>2</sup>School of Biological Sciences, University of Auckland



The behaviour of naturally occurring pollinators (bees and butterflies) was recorded at the site. A control orchid was also included at the site.



Average = 12 pollinator visits per hour.  
\*p < 0.05, \*\*p < 0.01 (log normal paired t-test).

Mantises  
attract  
even more  
pollinators  
than flowers!



“The primary purpose of presenting a poster is to complement yourself as you network with other scientists.”

Matt Carter: *Designing Science Presentations*

Understanding  
**WHY, WHO &  
WHAT**

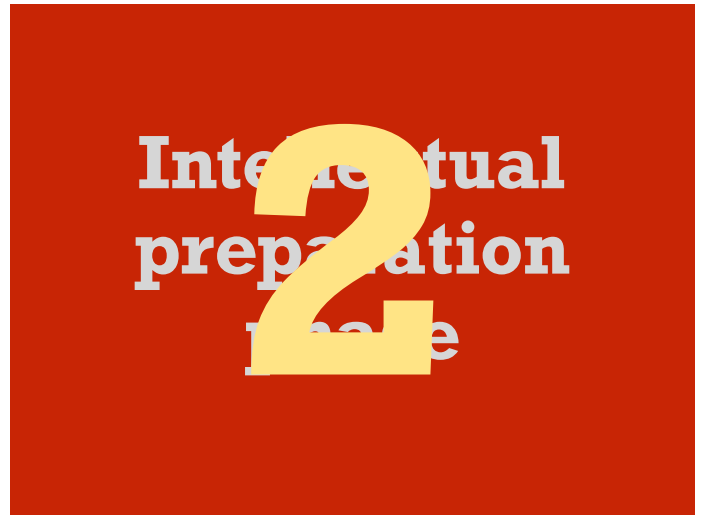
**WHY?  
WHO?  
WHAT?**

**Why attend a  
scientific meeting?**

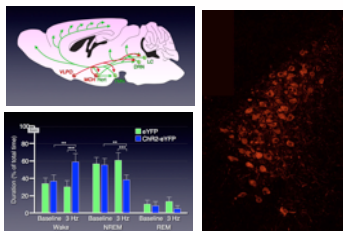
- ▶ Educate yourself.
- ▶ Set your benchmarks.
- ▶ Get new ideas.
- ▶ Get feedback on preliminary results.
- ▶ Market your research and your group.
- ▶ Network.

**Your peers can help you by providing ...**

- Clever feedback.
- Scientific knowledge.
- Technical and practical knowledge, skills and experience.
- Limited cooperation (e.g. offering antibodies).
- Extensive cooperation (shared research papers).
- Contacts – useful right now or in the future.



*The stars of the show*



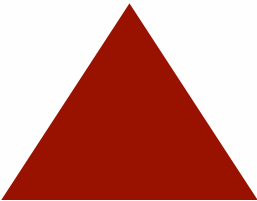
*The data displays!*

An illustrated  
**ABSTRACT**



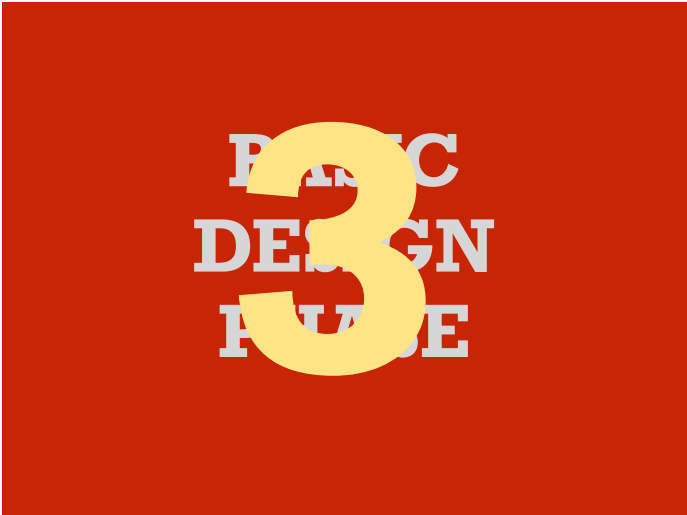
Part	What is included...
Introduction	The broader context and specific aim of the study (question, hypothesis).
Materials and Methods	How did you obtain data that will answer your question (test the hypothesis).
Results	What data were obtained.
Discussion (& Conclusions)	How your data and analysis answer the question and what it means for the broader field; what are the next steps.

Write the  
conference abstract



Prepare  
your visuals

Pick out  
main  
conclusions





Write a  
working title

TYPE 1: "Effects of substance X  
stimulation of protein X mediated  
gene Y expression in ABC cell line"

TYPE 2: "Substance X  
downregulates protein X mediated  
gene Y expression in ABC cell line"

Decide a  
logical order.

IMRAD



Write brief text  
for the different  
components.

Start designing!  
(PPt or InDesign)

**CARP**



**CONTRAST**



**ALIGNMENT**



**REPETITION**



**PROXIMITY**





Stick to  
the grid.

Think  
**BIG**

Add more  
text ...  
but keep it  
concise!

Let the  
content  
breathe!

Don't be  
too creative!

data/ink ratio

<https://bit.ly/2FOfUtP>

remove to improve

<https://bit.ly/2AUWksC>



Work on  
the title.

Remove stuff.

Shorten  
the texts.



Total word count: < 250 in total.

Increase the  
data/ink ratio  
in the visuals.

Prepare  
your verbal  
explanations.



1. What do you do?
2. What problem do you solve?
3. How are you different?
4. Why should I care?

1. What's your research about?
2. What is your research question?
3. What makes your research unique?
4. Why should I care?