

Scientific Presentation (Seminary)

Luiz Henrique Rodrigues

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Software Sistems Lab
IME - USP

May 10, 2019



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Summary

- 1 Introduction
- 2 Speech: The Words You Say
- 3 Structure: The Strategy You Choose
- 4 Visual Aids: Your Supporting Cast
- 5 Delivery: You, the Room, and the Audience
- 6 Conclusion



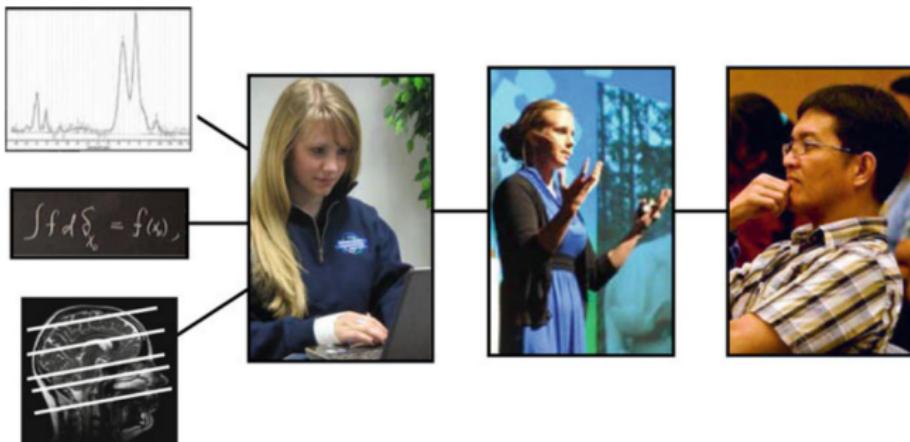
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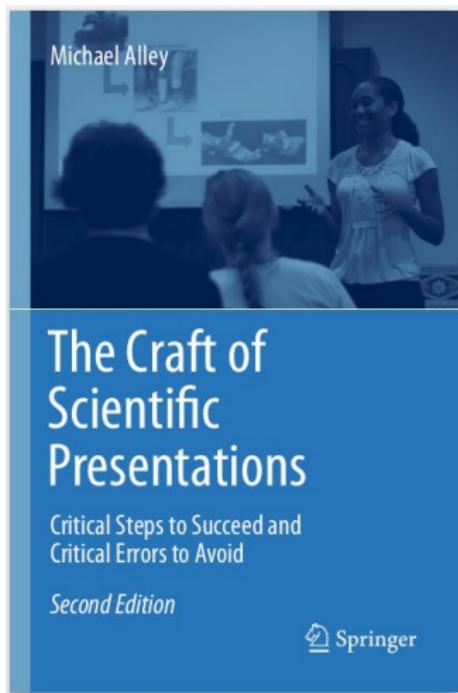


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Main Reference



<https://link.springer.com/book/10.1007/978-1-4419-8279-7>

Second Reference

Giving an effective presentation:
Using Powerpoint and structuring a scientific talk

based on a presentation at the
2005 Pew Foundation meeting by

Susan McConnell

Department of Biological Sciences
Stanford University

<https://player.slideplayer.com/6/5662281/> and
<https://profiles.stanford.edu/susan-mcconnell>



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Before planning your talk think about its purpose, the audience you will be talking to, and the setting

- Do not assume the audience will all be **experts**;
- Never **underestimate** your audience!
- Check on the **time** that has been allotted to you;
- **How big** is the room?



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Excellent scientific presentations are marked by **content**, **passion**, and a **keen sense** of the audience

- **Content** - Stephen Hawking



Excellent scientific presentations are marked by **content**, **passion**, and a **keen sense** of the audience

● **Passion** - Linus Pauling



Excellent scientific presentations are marked by **content**, **passion**, and a **keen sense** of the audience

- Achieving the **keen sense** of audience is not easy.



Excellent scientific presentations are marked by **content**, **passion**, and a **keen sense** of the audience

- **Content** - Stephen Hawking
- **Passion** - Linus Pauling
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Speech: The Words You Say

The **matching** of

- what is said to the **audience**,
 - **purpose**
 - **occasion**.
-
- Our challenge maintains the **audience's attention**.

After all, if the audience drifts off, then no communication occurs.



CRITICAL ERROR 1: Giving the Wrong Speech

- In **CRITICAL ERROR 1: Giving the Wrong Speech**, you assess what they know, why they are there, and what biases they hold
- The **CRITICAL ERROR 1: Giving the Wrong Speech** are often a blend of informing and persuading — and sometimes inspiring
- **CRITICAL ERROR 1: Giving the Wrong Speech**, although often overlooked, can greatly affect the way you present

Critical Error 1: Giving the Wrong Speech

- On January 27, 1986,
Conference call (2 hours - 13 presentation slides) faxed from
Morton Thiokol, NASA **remained unconvinced of the danger.**



Critical Error 1: Giving the Wrong Speech

- On January 27, 1986, Conference call (2 hours - 13 presentation slides) faxed from Morton Thiokol, NASA **remained unconvinced of the danger.**
- The next day, 63 seconds into the launch, a solid rocket booster of the space shuttle **Challenger exploded**, killing all seven crew members on board.



First Slide

Temperature Concern on SRM Joints

27 Jan 1986



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Second Slide

HISTORY OF O-RING DAMAGE ON SRM FIELD JOINTS

	Cross Sectional View			Top View			Clocking Location (deg)
	SRM No.	Erosion Depth (in.)	Perimeter Affected (deg)	Nominal Dia. (in.)	Length of Max Erosion (in.)	Total Heat Affected Length (in.)	
61A LH Center Field**	22A	None	None	0.280	None	None	36° - 66°
61A LH CENTER FIELD**	22A	NONE	NONE	0.280	NONE	NONE	338° - 18°
51C LH Forward Field**	15A	0.010	154.0	0.280	4.25	5.25	163
51C RH Center Field (prim)***	15B	0.038	130.0	0.280	12.50	58.75	354
51C RH Center Field (sec)***	15B	None	45.0	0.280	None	29.50	354
410 RH Forward Field	13B	0.028	110.0	0.280	3.00	None	275
41C LH Aft Field*	11A	None	None	0.280	None	None	--
410 LH Forward Field	10A	0.040	217.0	0.280	3.00	14.50	351
STS-2 RH Aft Field	28	0.053	116.0	0.280	--	--	50

*Hot gas path detected in putty. Indication of heat on O-ring, but no damage.

**Soot behind primary O-ring.

***Soot behind primary O-ring, heat affected secondary O-ring.

Clocking rotation of leak check port - 0 deg.

OTHER SRM-15 FIELD JOINTS HAD NO BLOWHOLES IN PUTTY AND NO SOOT
HEAR OR BEYOND THE PRIMARY O-RING

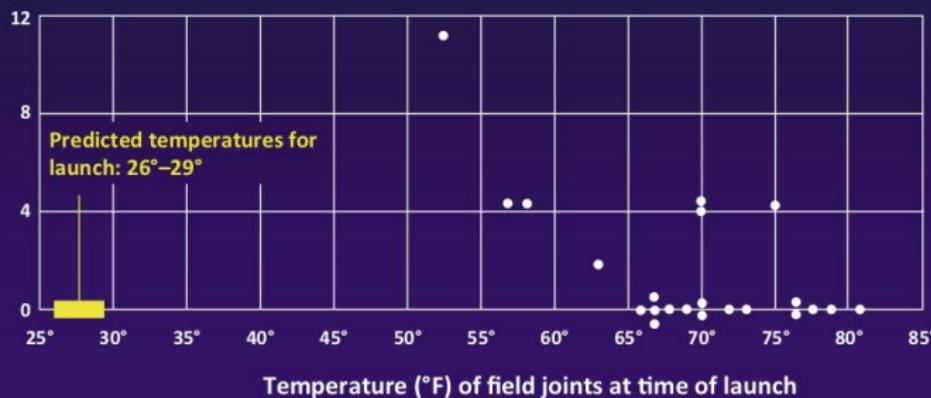
SRM-22 FORWARD FIELD JOINT HAD PUTTY PATH TO PRIMARY O-RING, BUT NO O-RING EROSION
AND NO SOOT BLOWBY. OTHER SRM-22 FIELD JOINTS HAD NO BLOWHOLES IN PUTTY.



Second Slide Proposed

The lower the launch temperature is, the more likely that erosion of the O-rings occurs

O-ring damage index,
each launch

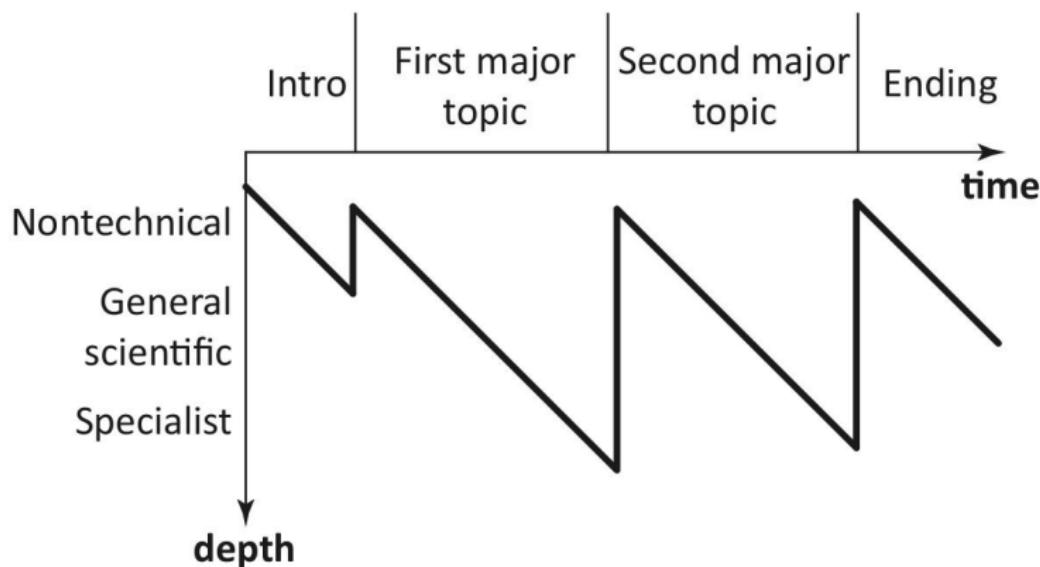


[Tufte, 1997]



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Targeting multiple audiences



Timeline showing presenter reaching multiple audiences



CRITICAL ERROR 2: Boring Your Audience

- In **CRITICAL ERROR 2: Boring Your Audience**, you assess what they know, why they are there, and what biases they hold
- The **CRITICAL ERROR 2: Boring Your Audience** Boring Your Audience are often a blend of informing and persuading — and sometimes inspiring
- **CRITICAL ERROR 2: Boring Your Audience**, Boring Your Audience although often overlooked, can greatly affect the way you present

Critical Error 2: Boring Your Audience

Perhaps the **most stinging criticism** for a presentation is that the talk is boring. Many talks are boring because the speaker projects bulleted list after bulleted list.

- fsdfds fsdf a s fadsfsa
- sddfdfs sadf sd fasdf
- asdfgfg ds fads
- fsdfds sdf asf ggda
- sddfdfs sdf afasfdfafds
- asdfgfg madf adf a faasdf
- sdfo ao fa faofasdfadaf
- aflsdl asof saos dfoa ssdf.



Critical Error 2: Boring Your Audience

**Strategies for many of these speakers is the use:
Stories can be engaging and memorable**



Physicists: Story 1



<https://elikatakimoto.com/2013/06/08/dialogos/>



Critical Error 2: Boring Your Audience

Strategies for many of these speakers is the use:

- **Stories** can be engaging and memorable
- **Examples and analogies** can help audiences understand unfamiliar concepts
- Making a **personal connection** is a way to connect with the emotions of audiences
- **Humor**, when appropriate, can energize an audience



Humor



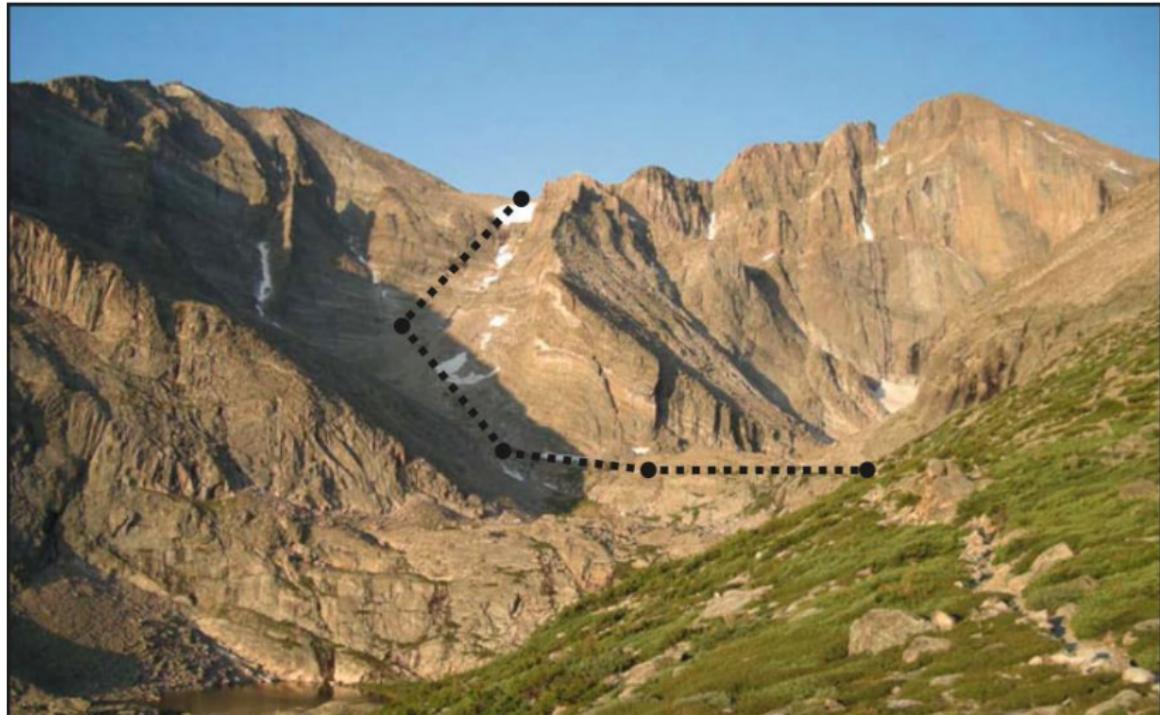
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Summary

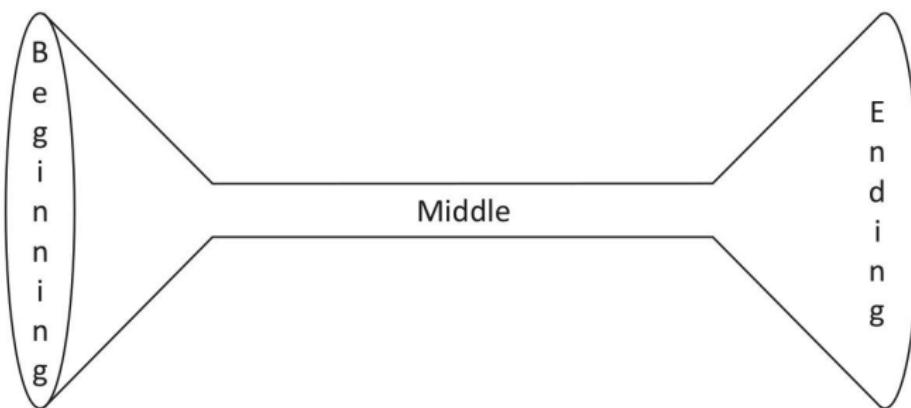
- 1 Introduction
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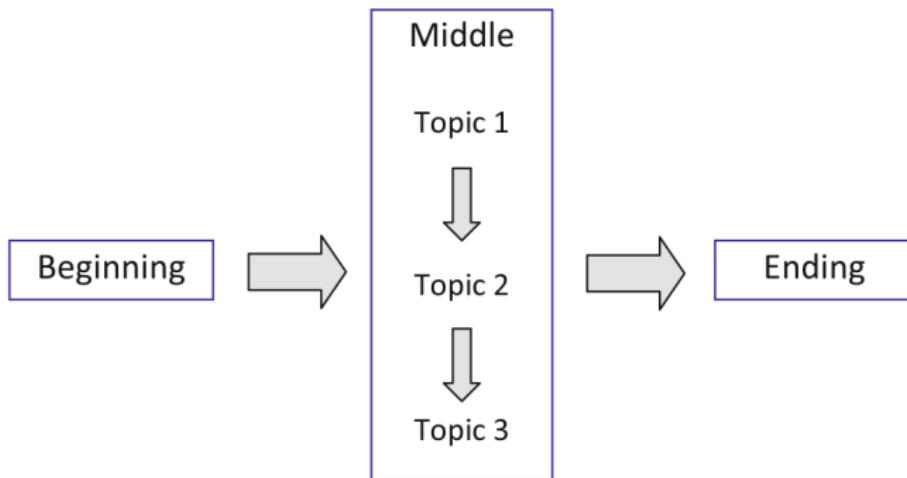
A guide choosing the entry point, keeping the audience on that path (depicted with the dotted line), and highlighting the important sights



Organization is the path up the mountain of your work



Transitions keep the audience on the trail



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Emphasis tells the audience when to appreciate the view

The structure of a good talk: start broad, get specific, and end broad



Start with the biggest questions
and get progressively more specific



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Emphasis tells the audience when to appreciate the view

A powerful tool in a talk is a “home slide”

Design and introduce a “home slide” that you’ll come back to at each major transition in your talk.



ME-USP



Home Slide



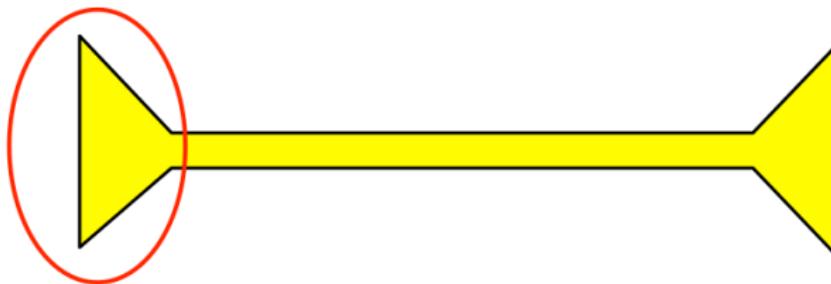
HOME SLIDE



IME-USP

Emphasis tells the audience when to appreciate the view

A powerful tool in a talk is a “home slide”



Now we'll build an introduction and a home slide
that puts the previous data into context.



Physicists: Story 2



<https://elikatakimoto.com/2013/06/08/dialogos/>



IME-USP

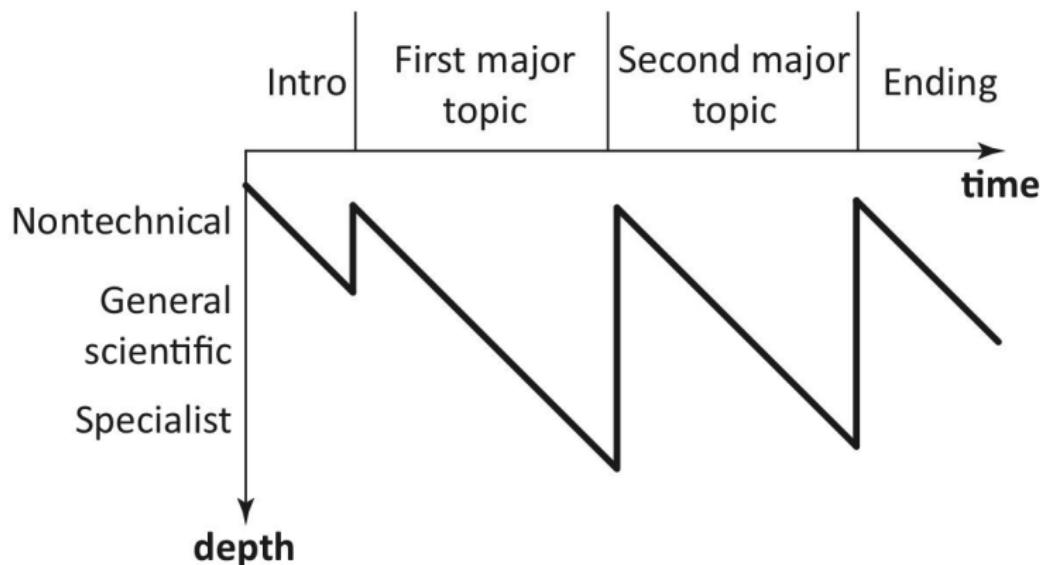
Emphasis tells the audience when to appreciate the view

The structure of a good talk: start broad,
get specific, and end broad

After going into depth, come back to
your home slide to make transitions



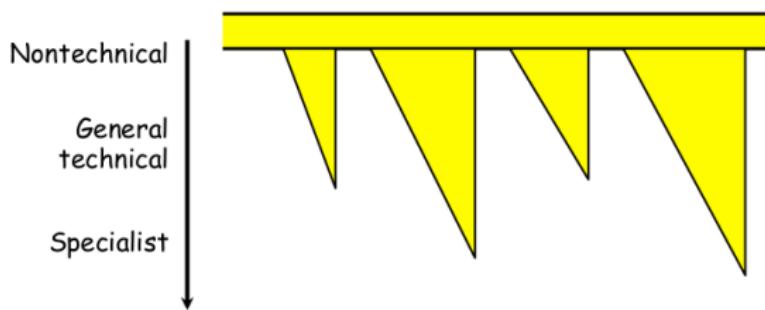
Emphasis tells the audience when to appreciate the view



IME-USP

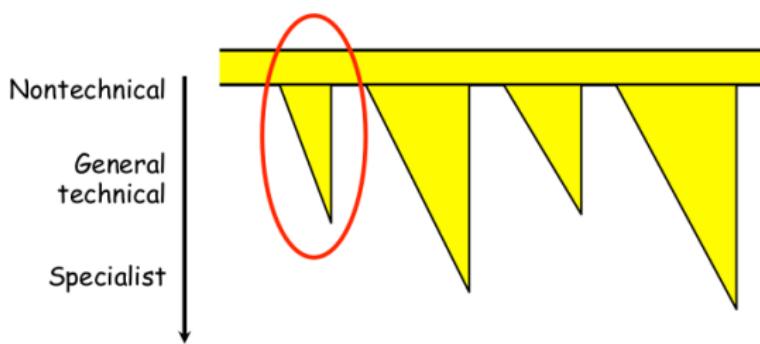
Emphasis tells the audience when to appreciate the view

After going into depth, come back to your home slide to make transitions



Emphasis tells the audience when to appreciate the view

Let's review "episode 1" (which we've already designed) and add a home slide

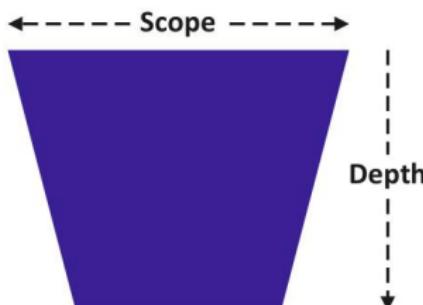


CRITICAL ERROR 3: Trying to Cover Too Much

- In **CRITICAL ERROR 3**, Trying to Cover Too Much you assess what they know, why they are there, and what biases they hold
- The **CRITICAL ERROR 3** Trying to Cover Too Much are often a blend of informing and persuading — and sometimes inspiring
- **CRITICAL ERROR 3**, Trying to Cover Too Much although often overlooked, can greatly affect the way you present

Critical Error 3: Trying to Cover Too Much

Relationship of depth and scope.



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Critical Error 3: Trying to Cover Too Much

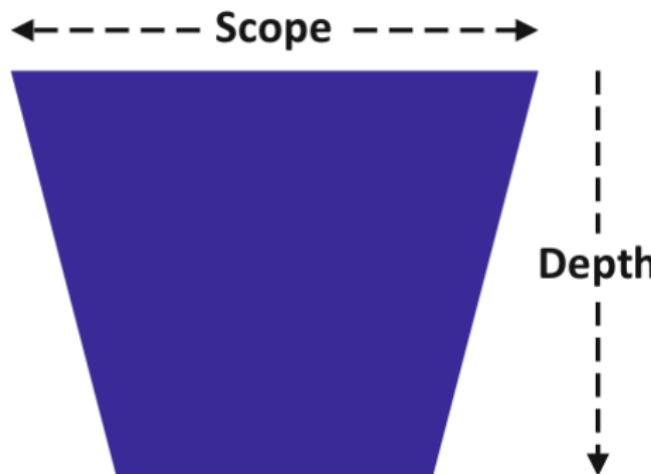
- Many talks fail because the scope is **too broad**



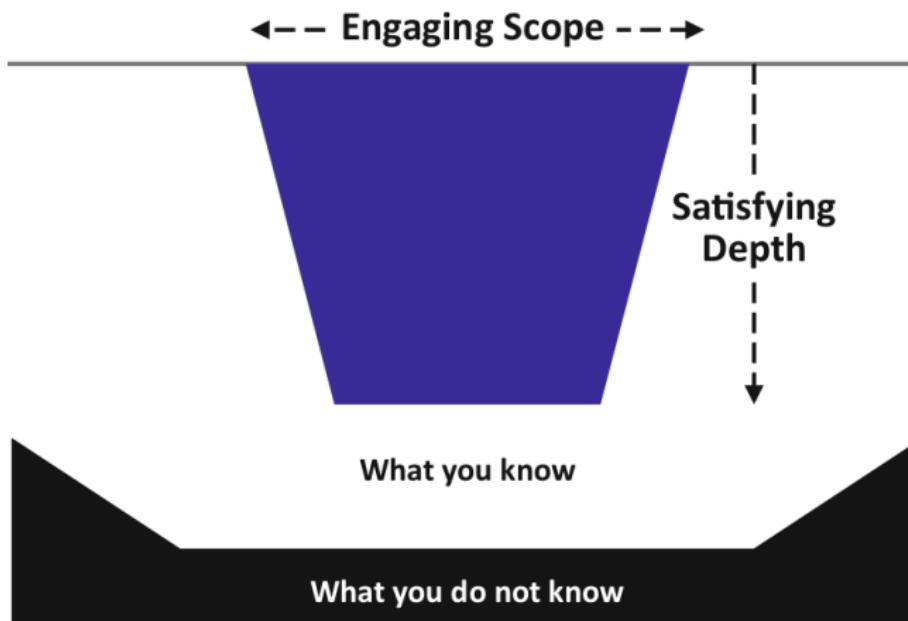
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Critical Error 3: Trying to Cover Too Much

- Many talks fail because the scope is **too deep**



Ideal selection of scope and depth



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Critical Error 4: Losing the Audience from the Start

- In **CRITICAL ERROR 4 : Losing the Audience from the Start**. what they know, why they are there, and what biases they hold
- The **CRITICAL ERROR 4 : Losing the Audience from the Start** Trying to Cover Too Much are often a blend of informing and persuading — and sometimes inspiring
- **CRITICAL ERROR 4**, Trying to Cover Too Much although often overlooked, can greatly affect the way you present

Critical Error 4: Losing the Audience from the Start

The beginning should:

- identify the **boundaries of the subject**
- show **the importance**
- provide needed background and **establish credibility**
- **memorably map** the talk



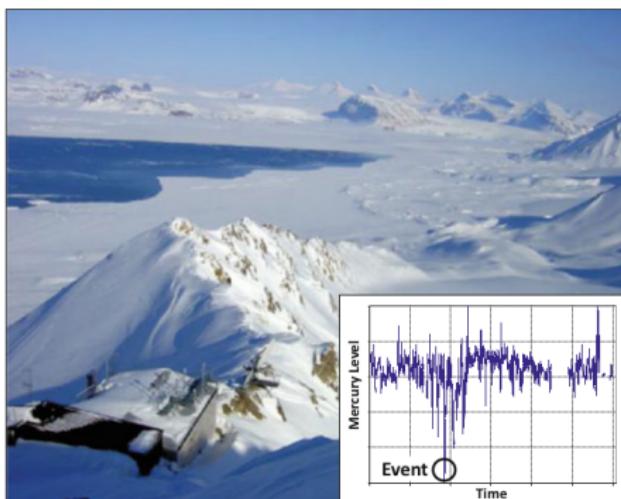
Critical Error 4: Losing the Audience from the Start

Discovering Where Mercury Goes After It Depletes from the Atmosphere

Katrine Aspmo
Torunn Berg
Norwegian Institute for
Air Research

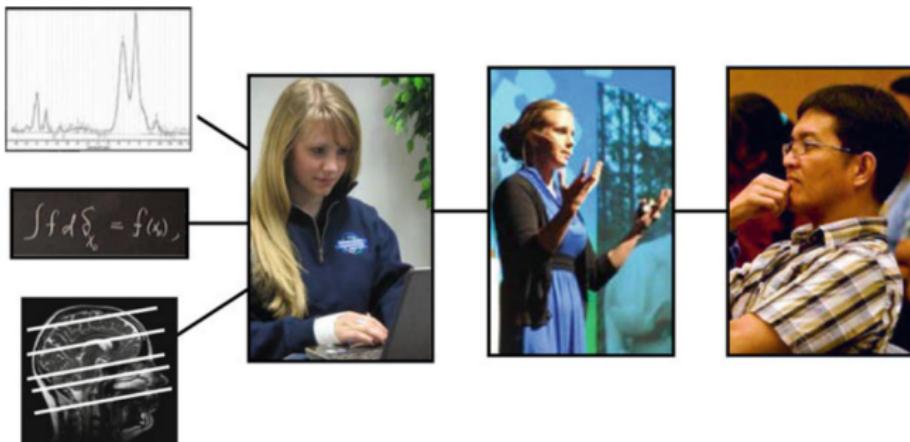
Grethe Wibetoe
University of Oslo,
Dept. of Chemistry

June 16, 2004



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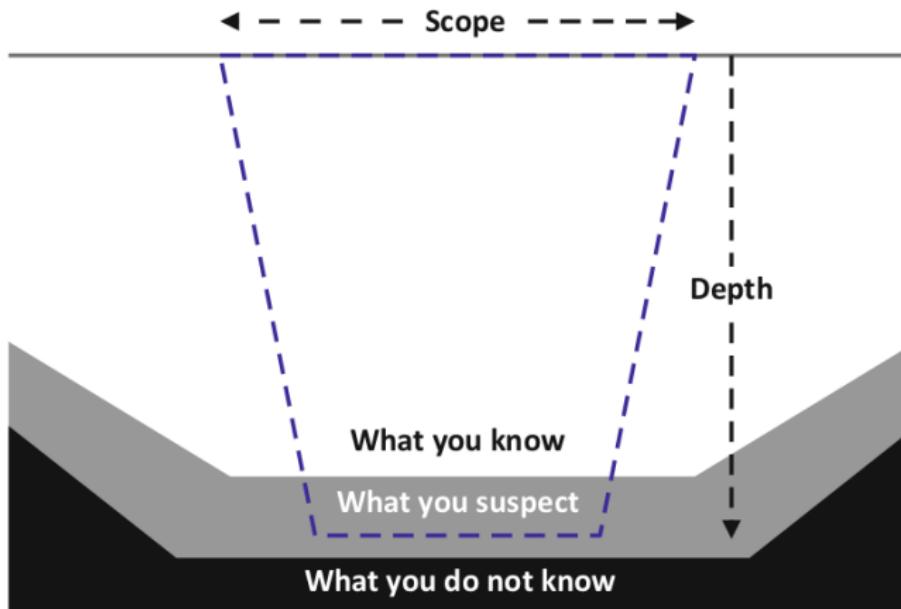
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Critical Error 5: Losing the Audience on the Trail

- In **Critical Error 5: Losing the Audience on the Trail**, Trying to Cover Too Much you assess what they know, why they are there, and what biases they hold
- The **Critical Error 5: Losing the Audience on the Trail** Trying to Cover Too Much are often a blend of informing and persuading — and sometimes inspiring
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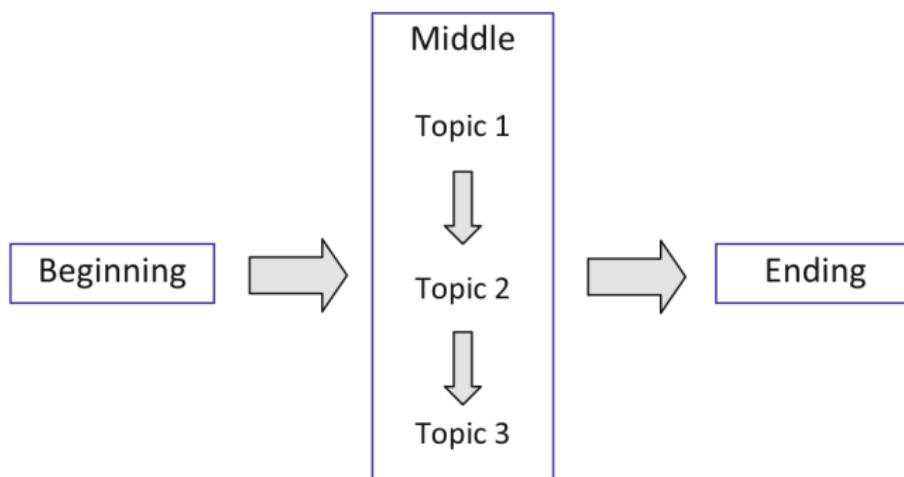
Critical Error 5: Losing the Audience on the Trail

The speaker has to choose a destination that the audience can reach



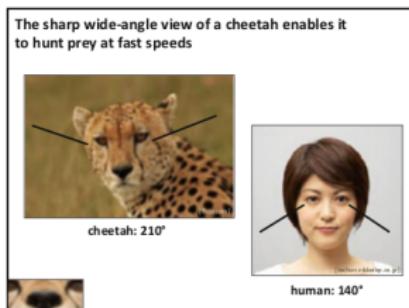
Transitions keep the audience on the trail

The speaker has to signal changes in direction

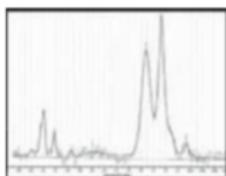


Critical Error 5: Losing the Audience on the Trail

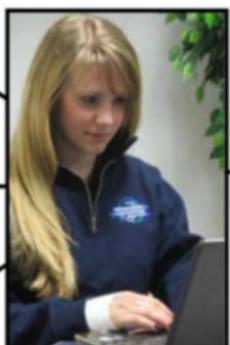
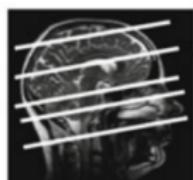
The speaker has to signal changes in direction



Scientific Presentation (Seminaries)



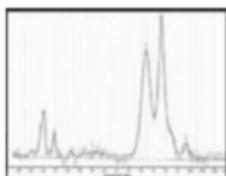
$$\int f d\delta_{x_0} = f(x_0)$$



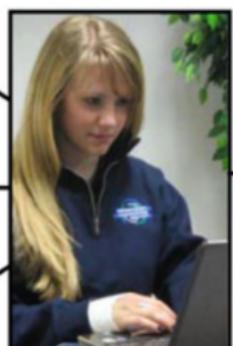
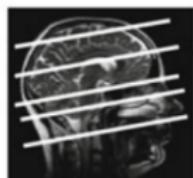
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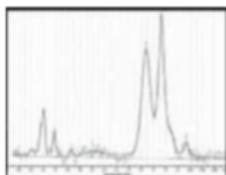
$$\int f d\delta_{x_0} = f(x_0)$$



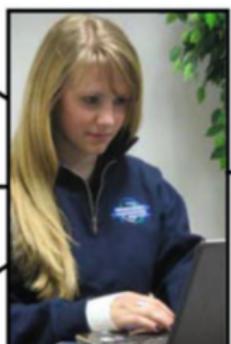
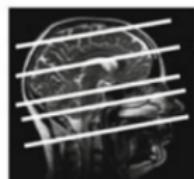
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Scientific Presentation (Seminaries)



$$\int f d\delta_{x_0} = f(x_0)$$



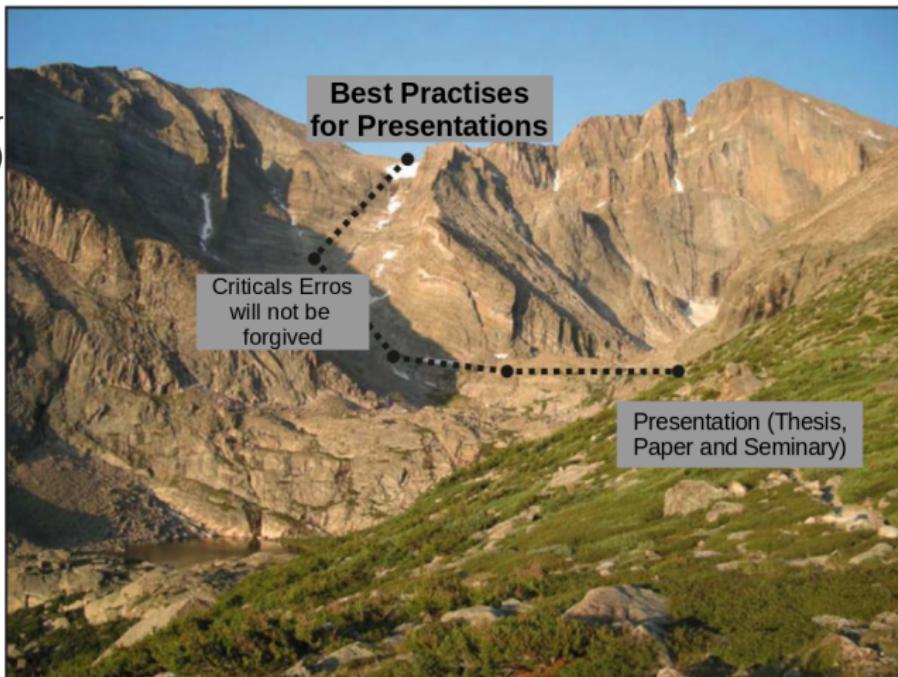
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Critical Error 6: Not Anticipating the Audience's Bias

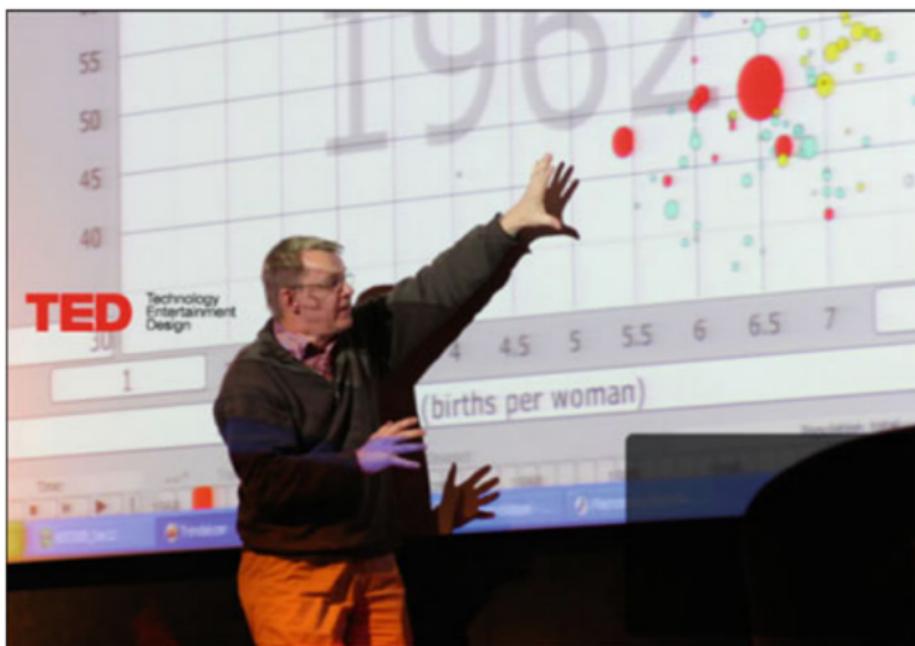
- In **Critical Error 6: Not Anticipating the Audience's Bias**,
- The **Critical Error 6: Not Anticipating the Audience's Bias** Trying to Cover Too Much are often a blend of informing and persuading — and sometimes inspiring
- **Critical Error 6: Not Anticipating the Audience's Bias**, Trying to Cover Too Much although often overlooked, can greatly affect the way you present

Mapping of how sub-assertions can help an audience reach a main assertion in a presentation



An audience is more likely to believe your argument if they know and appreciate the assertions

Hans Rosling presenting at TED



An effective argument provides ample evidence for the assertions - Appeals to Logic

- | | |
|---|---|
|  High relief |  Annual rainfall > 48 inches |
|  > 120 freezing days |  Coastal sedimentation |
|  High seismic hazard |  Limits of glaciation |



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An effective argument provides ample evidence for the assertions - Appeals to Logic

- | | |
|---|---|
|  High relief |  Annual rainfall > 48 inches |
|  > 120 freezing days |  Coastal sedimentation |
|  High seismic hazard |  Limits of glaciation |



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An effective argument provides ample evidence for the assertions - **Appeals to character**

- **Vitamin C**



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An effective argument provides ample evidence for the assertions - **Appeals to character**

- Vitamin C



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An effective argument provides ample evidence for the assertions -**Appeals to emotion**



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With an antagonistic audience, building **credibility** is crucial



O Antagonista



Portal



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Summary

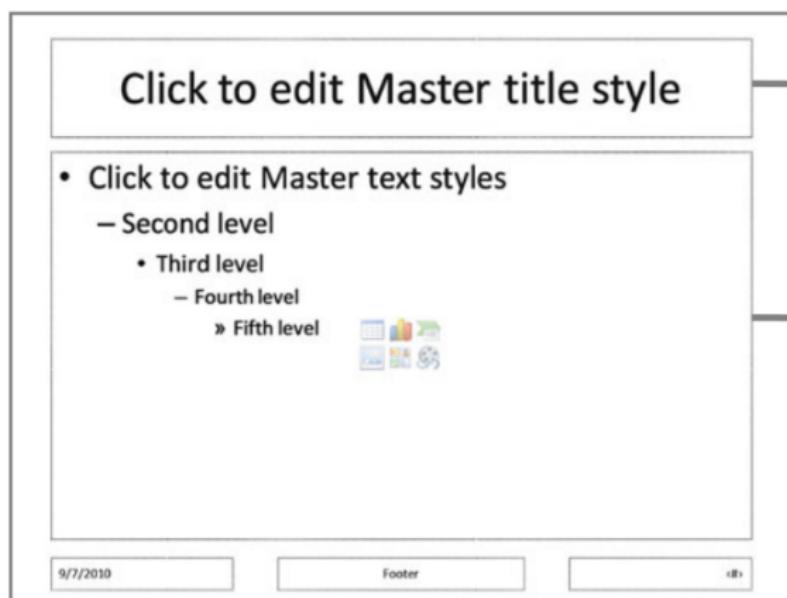
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Presentation slideware's defaults lead to a topic-subtopic structure, which is ineffective for scientific presentations

Click to edit Master title style

- Click to edit Master text styles
 - Second level
 - Third level
 - Fourth level
 - » Fifth level

Default text box
for headline

Default text box
for body text



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In their survey, more than two-thirds of all slides

Topic-Subtopic 40%

Digital Acquisition System Sampling

- Vibration measured by accelerometer
 - Analog voltage produced
 - Sinusoidal shape
- Analog signal converted to digital signal
- Signal sampled at a specific rate
- Rate → high enough to retain analog shape
- Signal exported to popular applications

Order of analysis

- Orbiter assessment of ascent debris damage includes
 - Evaluation of potential for debris to damage tile and RCC
 - Program "crater" is official evaluation tool
 - Available test data for SOFI on tile was reviewed
 - No SOFI on RCC test data available
 - Even for worst case, SIP and densified tile layer will remain when SOFI is impactor

Observations

- Segment C (not on the 520 Main St. Property) represents the dominant feature
- The characteristics of Segment C are vastly different than those of Segments A and B (which object property)
 - the dominant portion of the re suggestive of a perennia
- needed
- analysis is needed by a t hydrologist.

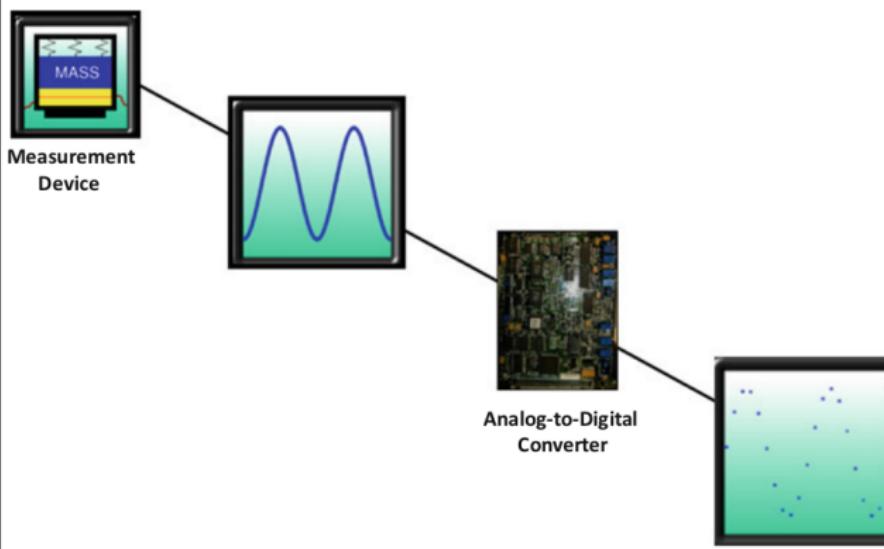
**Common practice—
we can do better**



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Common practice? – we can do better

A digital acquisition system samples at a rate high enough to preserve the shape of the analog signal

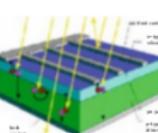


In their survey, more than a quarter of all slides

Topic-Subtopic + Graphic 26%

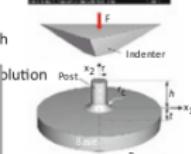
Physics of p-n Junction Based Cells

- A photon of $E > E_{gap}$ excites an electron into the conduction band, creating an electron-hole pair
- The electric field from the depletion zone



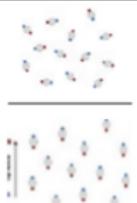
Micro-compression

- MTS Nano Indenter XP
- Modified Berkovich Indenter
- Load applied with coil/magnet assembly
- Load Resolution 50nN
- Displacement measured with capacitance gauge



How the MRI Process Begins

- Atoms have spins, which:
 - Act like vectors
 - Point in random directions
- In an MRI, patient experiences strong magnetic field
- Spins of patient's atoms then align parallel to field



Common practice—
we can do better



Three ways that presentation slides affect the success: preparation, delivery, and audience understanding

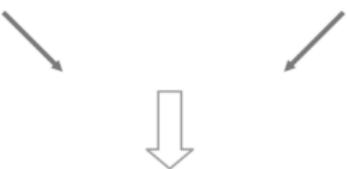


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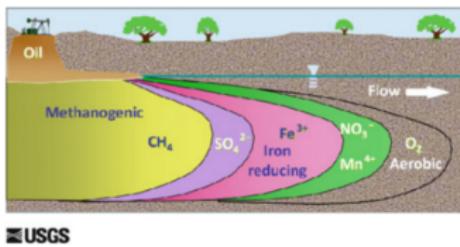


Assertion-evidence slides lead to more focused talks and more engaging deliveries

A succession of electron acceptors occurs when an aquifer becomes contaminated with oil



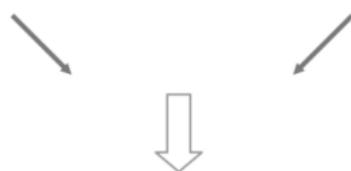
A succession of electron acceptors occurs when an aquifer becomes contaminated with oil



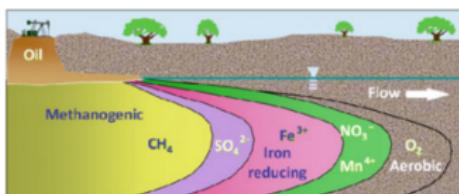
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Assertion-evidence slides lead to more focused talks and more engaging deliveries

A succession of electron acceptors occurs when an aquifer becomes contaminated with oil



A succession of electron acceptors occurs when an aquifer becomes contaminated with oil



Observations

Observations

- Segment C (not on the 520 Main St. Property) represents the dominant feature
 - The characteristics of Segment C are vastly different than those of Segments A and B (which are located on the subject property)
 - The characteristics of the dominant portion of the system (Segment C) are suggestive of a perennial stream
 - Direct observations are needed
 - A detailed technical analysis is needed by a qualified, independent hydrologist.

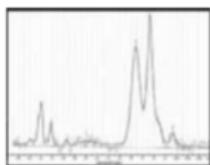


Critical Error 7: Following the Defaults of electronic presentations

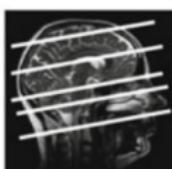
- In **Critical Error 7: Following the Defaults of electronic presentations**, Trying to Cover Too Muchyou assess what
- The **CRITICAL ERROR 7: Following the Defaults of electronic presentations**
- **CRITICAL ERROR 7**, Trying to Cover Too Muchalthough often overlooked, can greatly affect the way you present

An assertion-evidence slide calls for a succinct **sentence headline** that states the slide's main assertion

headlines help audience and speaker



$$\int f d\delta_x = f(x),$$



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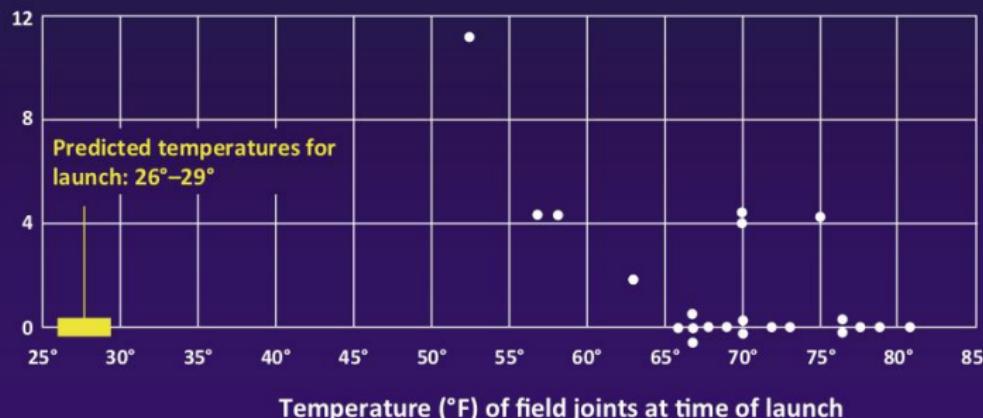


An assertion-evidence slide calls for supporting the headline with visual evidence, **not bulleted lists** main assertion

headlines help audience and speaker

The lower the launch temperature is, the more likely that erosion of the O-rings occurs

O-ring damage index,
each launch



An assertion-evidence slide calls for supporting the headline with visual evidence, **not bulleted lists** main assertion

The computer simulation of an event is an iterative process

$$\begin{aligned} & \frac{\partial(p_{\text{air}})}{\partial x} = \frac{\partial(p_{\text{air}})}{\partial x} + \frac{\partial(p_{\text{air}})}{\partial z} \\ & = -\frac{\partial p}{\partial x} + \frac{\partial}{\partial z} (\lambda \nabla^2 u + 2u_x) - \frac{\partial}{\partial z} u_x \\ & + \frac{\partial}{\partial z} u \left(\frac{\partial u}{\partial x} + \frac{\partial u}{\partial z} \right) - u_x^2 \\ & \frac{\partial(p_{\text{air}})}{\partial z} = \frac{\partial(p_{\text{air}})}{\partial z} + \frac{\partial(p_{\text{air}})}{\partial x} \\ & = -\frac{\partial p}{\partial z} + \frac{\partial}{\partial x} (\lambda \nabla^2 u + 2u_x) + \frac{\partial}{\partial x} u_x \end{aligned}$$

```

void PressureUz::integrand
  (const Mat &umat, const FiniteElement &fe)
{
  const int nsd = fe.getNoSpaceDim();
  real div_v=0;
  for (int k = 1; k <= nsd; k++) {
    data->uf(k).derivativeHxM (data->grad_u,
      &v->data->grad_u(k));
    // grad_u_nt is a VecSimplePtr(real)
  }
}

```

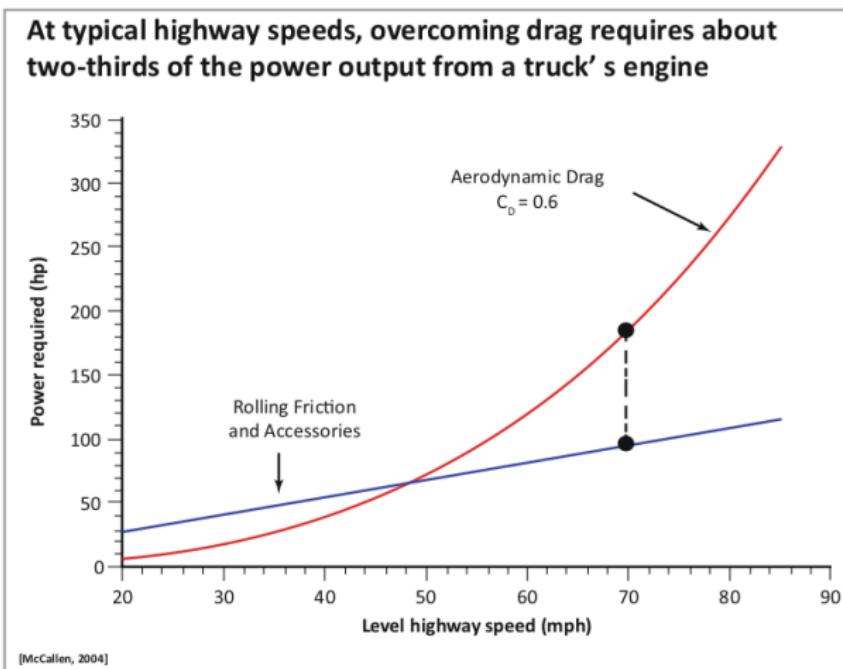
$$\begin{aligned} F_1 = & \int_{\Omega} \left(c_1 u_1^{k+1} - c_2 u_2^{k+1} + \beta c_3 u_3^{k+1} \right. \\ & \left. + (1-\phi) \alpha c_4 u_4^{k+1} \right) dx \\ = & \int_{\Omega} \left(\phi u_1^{k+1} + (1-\phi) \alpha u_4^{k+1} \right) dx - \\ & \int_{\Omega} \left((1-\phi) \alpha u_4^{k+1} + (1-\phi) \alpha u_4^{k+1} \right) dx \\ = & \int_{\Omega} \left((1-\phi) \alpha u_4^{k+1} \right) dx
\end{aligned}$$

[simula.research laboratory]



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An assertion-evidence slide calls for supporting the headline with visual evidence, **not bulleted lists** main assertion



An assertion-evidence slide calls for supporting the headline with visual evidence, **not bulleted lists** main assertion

**Most streams classified in fair condition
because of high chloride and sulfate concentrations**

West Virginia Parks:
48% Fair
Sulfate caused most
impairment



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An assertion-evidence slide calls for supporting the headline with visual evidence, **not bulleted lists** main assertion

**Most streams classified in fair condition
because of high chloride and sulfate concentrations**



Delaware River Parks:
79% Fair
Chloride caused most impairment

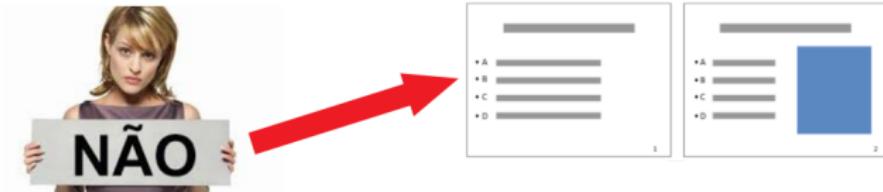


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For slides to be effective, the **format must rise above** Slideware's defaults



For slides to be effective, the **format must rise above** Slideware's defaults



For slides to be effective, the **format must rise above** Slideware's defaults



For slides to be effective, the **format must rise above** Slideware's defaults

28 points

Headline of slide

24 points

Supporting text for body of slide

20 points

Supporting text for body of slide

18 points

Supporting text for body of slide

14 points

Reference listing (not bold)

12 points

Reference listing, small room (not bold)



Critical Error 8: Following the Common Practices of Electronic Presentations Talks

- In **Critical Error 8: Following the Common Practices of Electronic Presentations Talks**, Trying to Cover Too Much you assess what they know, why
- The **Critical Error 8: Following the Common Practices of Electronic Presentations Talks** informing and persuading — and sometimes inspiring
- **Critical Error 8: Following the Common Practices of Electronic Presentations Talks**,

Title slides should orient, outline slides should map, and concluding slides should emphasize

Weak title slides:
We can do better

Aerodynamics and Heat Transfer
for Airfoil-End wall Junctures
in Gas Turbine Engines

Kerry Mensch
AeroVane Solutions
20 June 2011

Failure Analysis
of an Ice Detector
on the Austrian 13 Helicopter

Drew Whitcomb
Consulting Solutions
13 June 2011



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Title slides should orient, outline slides should map, and concluding slides should emphasize

Failure Analysis of an Ice Detector on the Austria 13 Helicopter

Manning Stelzer

CURE / Engineering
Sikorsky Aircraft

April 30, 2004



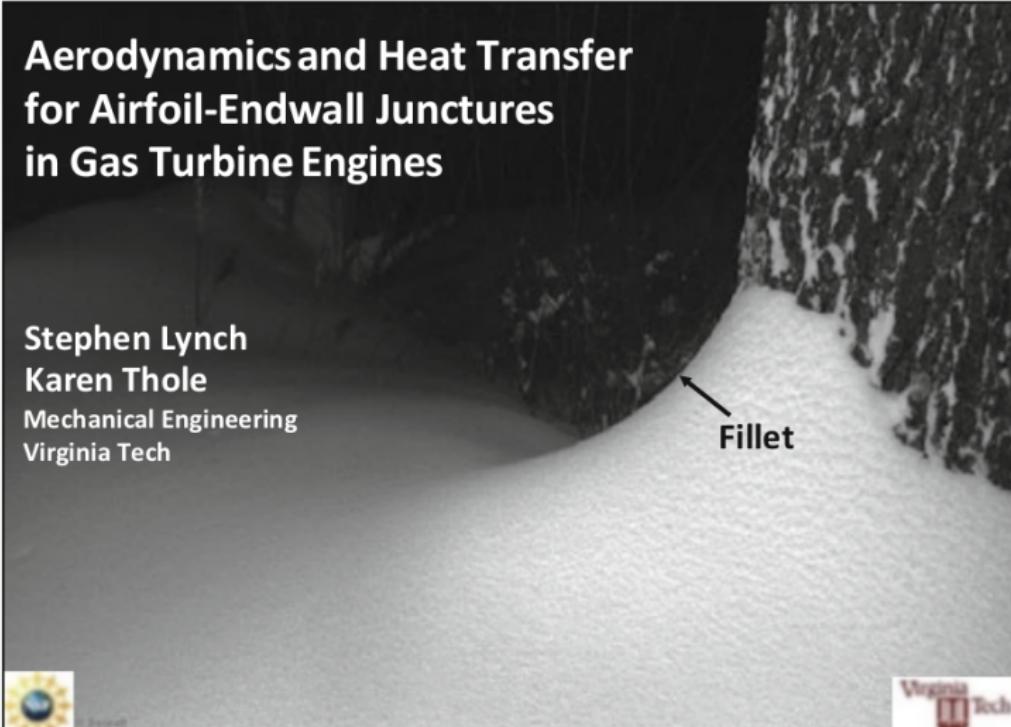
IME-USP



Title slides should orient, outline slides should map, and concluding slides should emphasize

Aerodynamics and Heat Transfer for Airfoil-Endwall Junctures in Gas Turbine Engines

Stephen Lynch
Karen Thole
Mechanical Engineering
Virginia Tech



Fillet



Title slides should orient, **outline slides should map**, and concluding slides should emphasize

Weak mapping slides:
We can do better

Outline

- Background
- Theory for Hg Cycling
- Measurements from Station
- Environmental Implication
- Conclusion
- Questions

Topics to be Covered

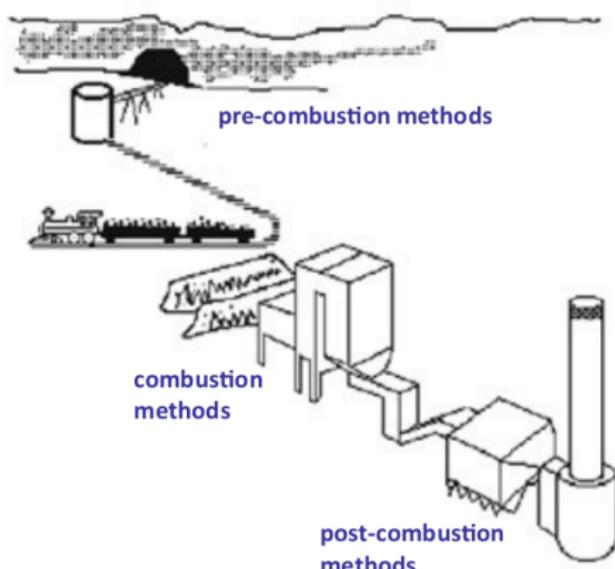
- Introduction
- Background
- Pre-Combustion Methods
 - Coal cleaning
 - Coal switching
- Combustion Methods
 - Atmospheric fluidized bed
- Post-Combustion Methods
 - Absorption
 - Adsorption
- Conclusion
- Acknowledgments
- Questions



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Title slides should orient, **outline slides should map**, and concluding slides should emphasize

This presentation compares methods for reducing emissions of sulfur dioxide from coal power plants

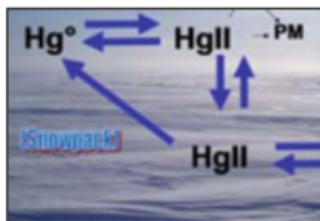


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Title slides should orient, **outline slides should map**, and concluding slides should emphasize

This talk compares the theory for mercury depletion with our measurements and gives environmental implications



Theory for Hg depletion



Measurements from station



Environmental implications



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Title slides should orient, **outline slides should map**, and concluding slides should emphasize

**Operator splitting gives a sequence of PDEs
and one ODE per spatial point**

$$\frac{\partial c_i(x, t)}{\partial t} = -\frac{\partial}{\partial x}[f_i(x, t)] \quad \text{for } x \in \Omega$$

Concentration c_i of
specie #i, $i=1,\dots,n_{ion}$

$$f_i(x, t) = -D_i(x, t) \frac{\partial c_i(x, t)}{\partial x} - k_i(x, t) c_i(x, t),$$

$$k_i(x, t) = -D_i(x, t) z_i \frac{F}{RT} E(x, t)$$

Unknowns c_i and E

$$\frac{\partial E(x, t)}{\partial t} = I - F \sum_{i=1}^{n_{eq}} z_i f_i(x, t) \quad \text{for } x \in \Omega$$

Electrical field E



Title slides should orient, outline slides should map, and concluding slides should emphasize

Weak concluding slides:
We can do better

Thank You
Questions?

Questions?



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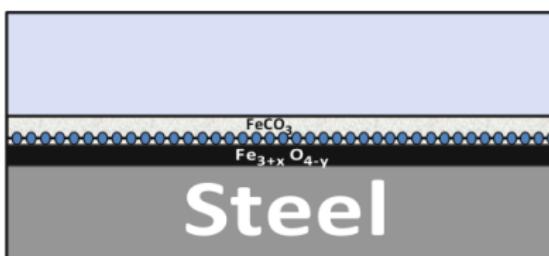
Title slides should orient, outline slides should map, and concluding slides should emphasize

In summary, high concentrations of acetic acid help protect steel from corrosion

Adsorbed HOAc allows the growth of siderite



A thick siderite layer protects the steel from corrosion



Questions?



Title slides should orient, outline slides should map, and concluding slides should emphasize



¿Preguntas?



The TED slide structure

A dog's sense of smell is 10,000 times sharper than a human's



The TED slide structure



2

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Sequencing slides can be effective by:

- An evidence-assertion order,
- Pecha kucha,
- The Lessig style, and
- Prezi



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Critical Error 9: Not Accounting for Murphy's Law

- In Critical Error 9: Not Accounting for Murphy's Law
- The Critical Error 9: Not Accounting for Murphy's Law
- Critical Error 9: Not Accounting for Murphy's Law

Critical Error 9: Not Accounting for Murphy's Law

- **Weigh the risks** of incorporating visual aids
- Should **rehearse**
- You should **arrive early** to the room
- With presentations, you should **prepare for the worst**



Summary

- 1 Introduction
- 2 Speech: The Words You Say
- 3 Structure: The Strategy You Choose
- 4 Visual Aids: Your Supporting Cast
- 5 Delivery: You, the Room, and the Audience
- 6 Conclusion



The appropriate delivery depends on the speaker and the situation



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You can significantly improve your delivery with practice and reflection



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Critical Error 10: Not Preparing Enough

- Critical Error 10: Not Preparing Enough
- Critical Error 10: Not Preparing Enough
- Critical Error 10: Not Preparing Enough

Critical Error 10: Not Preparing Enough

- ① Before opening the computer,



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Critical Error 10: Not Preparing Enough

- ① Before opening the computer,
- ② **You should decide upon the story of the talk**



Critical Error 10: Not Preparing Enough

- ① Before opening the computer,**
- ② You should decide upon the story of the talk**
- ③ You are in position to create your visual aids**



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Critical Error 10: Not Preparing Enough

- ① Before opening the computer,
- ② **You should decide upon the story of the talk**
- ③ You are **in position to create your visual aids**
- ④ In addition to preparing **yourself to speak**



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Critical Error 10: Not Preparing Enough

- ① Before opening the computer,
- ② **You should decide upon the story of the talk**
- ③ You are **in position to create your visual aids**
- ④ In addition to preparing **yourself to speak**
- ⑤ Speaking in a **second language** requires additional preparation



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Critical Error 11: Drawing Words from the Wrong Well

- Critical Error 11: Drawing Words from the Wrong Well,
- Critical Error 11: Drawing Words from the Wrong Well
- Critical Error 11: Drawing Words from the Wrong Well

Critical Error 11: Drawing Words from the Wrong Well

- For most scientific presentations, a **practiced extemporaneous talk** is the best overall strategy
- While not the approach to choose for a planned talk, **impromptu speaking** is an important skill
- **Memorizing** can be effective for **short portions of talks** such as first and last sentences
- **Reading** is sometimes necessary when the audience will **scrutinize** your every word



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Critical Error 12: Not Paying Attention

- Critical Error 12: Not Paying Attention,
- Critical Error 12: Not Paying Attention
- Critical Error 12: Not Paying Attention

Critical Error 12: Not Paying Attention

- Pay attention to the room
- Pay attention to yourself
- Pay attention to the audience
- Pay attention to the time



Critical Error 13: Losing Composure

- Critical Error 13: Losing Composure,
- Critical Error 13: Losing Composure
- Critical Error 13: Losing Composure

Critical Error 13: Losing Composure

- Preparing, thinking positively, and having the proper focus are keys to handling nervousness
- In handling a question, you should understand what was asked, think about that question, and answer honestly
- Passion fuels preparation, which leads to confidence



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Summary

- 1 Introduction
- 2 Speech: The Words You Say
- 3 Structure: The Strategy You Choose
- 4 Visual Aids: Your Supporting Cast
- 5 Delivery: You, the Room, and the Audience
- 6 Conclusion



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Physicists: Story 3



<https://elikatakimoto.com/2013/06/08/dialogos/>

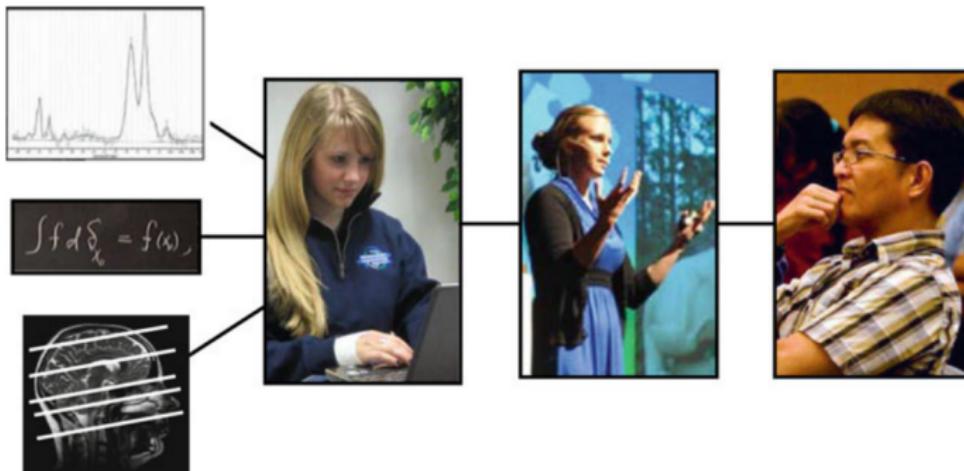


10 tips to develop confidence in conference presentations

- Expect to be nervous
- Prepare
- Practice
- Breathe
- Rehearse
- Focus on your audience
- Simplify
- Picture success
- Connect with your audience
- Be confident



Scientific Presentation (Seminaries)



¿Questions?



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Scientific Presentation (Seminary)

Luiz Henrique Rodrigues

InterSCity Project
Software Sistems Lab
IME - USP

May 10, 2019



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