

# Workshop #4: **Giving a Talk.**

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w/ scribbles by Raf

Some talks are **amazing**.

fascinating content + clear presentation + fun

→ “airplane-mode talk”

Other talks are **literally the worst**.

unclear what is content + bad presentation + not fun

→ “collective marginal politeness”

Today: Get them to clap because **they loved it**.  
Not because they're glad it's over.

# Tips for giving good talks.

1. Philosophy, structure, and strategy.
2. Slide rules so your slides rule.
3. How to improve efficiently.
4. Game-day tips.

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- entice** someone to read your paper,
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- teach** the audience a new idea or result,
- excite** people about working in your area.

# First, why give a scientific talk?

A talk is **information transfer & a performance**. It can...

**for you**

**entice** someone to read your paper,

**bring** you that job/data/collaborator/respect,

**for science**

**teach** the audience a new idea or result,

**excite** people about working in your area.

# First, why give a scientific talk?

A talk is **information transfer & a performance**. It can...

**for you**

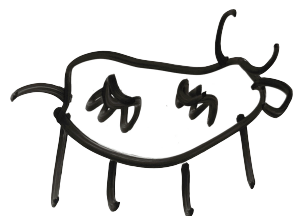
**entice** someone to read your paper,

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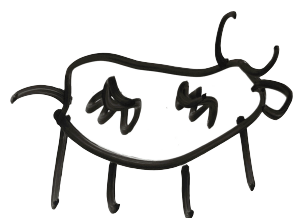
**teach** the audience a new idea or result,

**excite** people about working in your area.



**Step 1:** decide what you want *and write it down*.

Ex: I want you to think of **this talk** first, the next time you prepare a presentation.



**Step 1:** decide what you want *and write it down*.

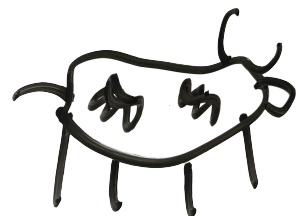
# Second, identify **the idea.**

A talk should focus on **an idea, not a paper.**

Compare: “I want to tell you about a finding.” vs “I want to tell you about my paper.”

The idea is the cargo of the talk. The thing they take home.

What will they say when asked what your talk was about?



**Step 2:** identify your cargo *and write it down.*



Third, identify **your audience**.

Try to put yourself **in their position**.

What are their brains going to be like, *when you give the talk?*

Estimate their knowledge, opinions, mood, fatigue, etc.

Consider audience variance, not just mean.

And, err on the side of *overestimating* variance.



**Step 3:** model your audience, and *write that down*.

# Fourth, set your **slide budget**.

1 slide = 1 minute.

Start with this unit conversion.  
Give 5 talks. Only *then* adjust.

Filler slides count.

**A 10-minute talk.**

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

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**A 10-minute talk.**

1. Title Slide

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10. Thx & Acknowledgements

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## A **10-minute talk.**

General Structure:

Tell 'em what you'll tell 'em.

Tell 'em.

Tell 'em what you told 'em.

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9. **What you told 'em. + 1 Q**

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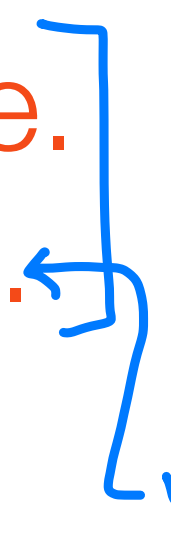
## A **10-minute talk.**

General Structure:

- Tell 'em what you'll tell 'em.
- Tell 'em.
- Tell 'em what you told 'em.

1. Title Slide
2. **Intro. Entice audience.**
3. **Intro. Hook audience.**
- 4.
- 5.
- 6.
- 7.
- 8.
9. What you told 'em. + 1 Q
10. Thx & Acknowledgements

Just like a paper's intro



"gap"

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## A **10-minute talk.**

General Structure:

Tell 'em what you'll tell 'em.

Tell 'em.

Tell 'em what you told 'em.

1. Title Slide
2. Intro. Entice audience.
3. Intro. Hook audience.
4. **Outline. What you'll tell 'em.**
- 5.
- 6.
- 7.
- 8.
9. What you told 'em. + 1 Q
10. Thx & Acknowledgements

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Tell 'em what you'll tell 'em.

Tell 'em.

Tell 'em what you told 'em.

1. Title Slide
2. Intro. Entice audience.
3. Intro. Hook audience.
4. Outline. What you'll tell 'em.
5. [Result]
6. [Result]
7. [Result]
8. [Result]
9. What you told 'em. + 1 Q
10. Thx & Acknowledgements



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Give 5 talks. Only *then* adjust.

Filler slide

A **10-minute**

General Structure:

Tell 'em what you'll tell 'em.

Tell 'em.

Tell 'em what you told 'em.

1. Title Slide

2. Intro. Entice audience.

3. Intro. Hook audience.

4. Tell 'em.

6. [Result]

7. [Result]

8. [Result]

9. What you told 'em. + 1 Q

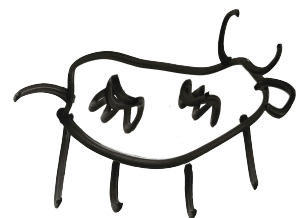
10. Thx & Acknowledgements

Only four slides of content.  
The rest is [important] narrative.

# Fourth, set your slide budget.

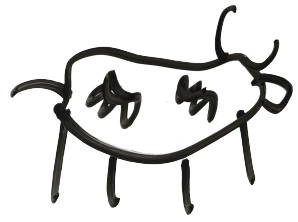
Write **1 sentence** for each slide, that **explains what the slide will do** or **chooses a figure** for the slide.

1. Title Slide
2. Intro. Entice audience.
3. Intro. Hook audience.
4. Outline. What you'll tell 'em.
5. [Result]
6. [Result]
7. [Result]
8. [Result]
9. What you told 'em. + 1 Q
10. Thx & Acknowledgements

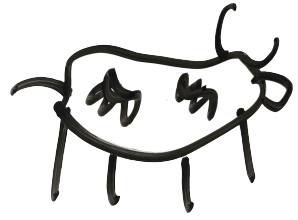


**Step 4:** budget + topic sentence for each slide.

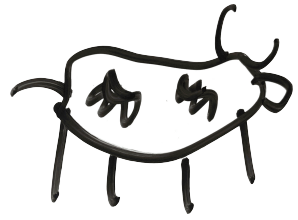
# Recapping the strategy so far:



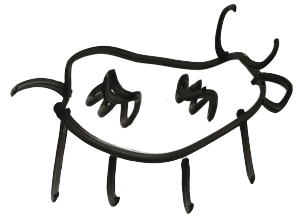
**Step 1:** decide *what you want* and write it down.



**Step 2:** identify *your cargo* and write it down.



**Step 3:** model *your audience*, and write that down.



**Step 4:** *budget + topic sentence* for each slide.

Finally, **refine & enhance** your outline.

People like stories.

**Coherent narratives.** The story of the problem.

**Personal puzzles.** The story of the research & you.

**Plot twists.** Surprises. Confusion. Resolution.

People like to feel smart.

Take **one hard thing** and **help the audience get it.** ✓

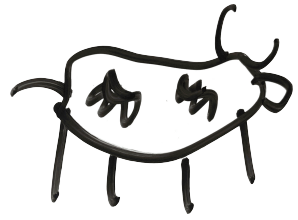
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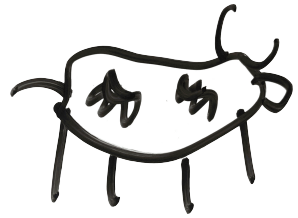
People like to feel smart.

1. Title Slide
2. Intro. Entice audience.
3. Intro. Hook audience.
4. Outline. What you'll tell 'em.
5. [Result]
6. [Result]
7. [Result + Aha! moment]
8. [Result]
9. What you told 'em. + 1 Q
10. Thx & Acknowledgements

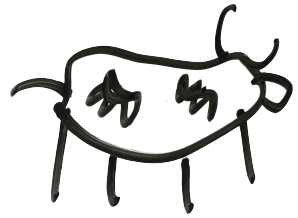
# Philosophy, structure, and strategy.



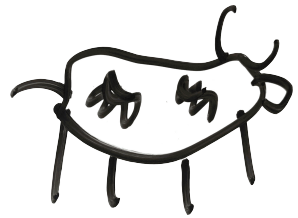
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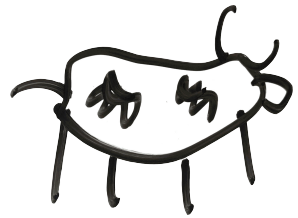
**Step 2:** identify **your cargo** *and write it down.*



**Step 3:** model **your audience**, *and write that down.*



**Step 4:** **budget + topic sentence** for each slide.



**Step 5:** **refine & enhance** with narrative & “Aha!”

Observation: at this point, you don't have any slides.

*Storyboard!*

# Tips for giving good talks.

1. Philosophy, structure, and strategy.
2. **Slide rules so your slides rule.**
3. How to improve efficiently.
4. Game day tips.

# Slide rules.

Aspect ratio: widescreen only. It's 2020.

*Wait really?*



# Slide rules.

## No unexplained figures.

And no unexplained axes.

[Literally no point in figures if people don't get them.]

And also:

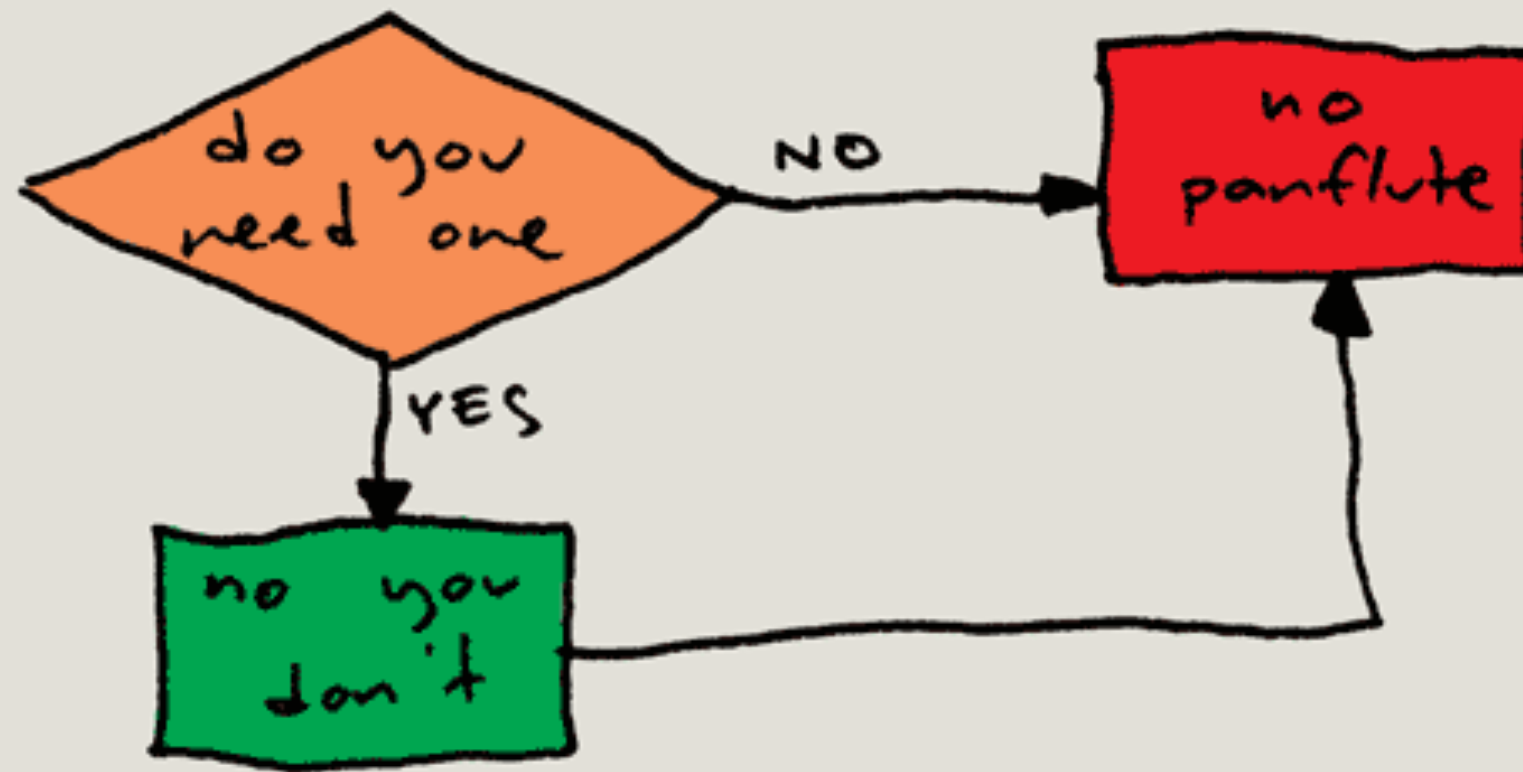
1. Say “horizontal” and “vertical”, not x and y.
2. Consider putting up the axes before the content, and set expectations or ask for speculation [budget this]. What do we expect this plot will show? [\[Example\]](#)
3. Remake labels from the PDF version of figures in larger fonts for your talks. [\[Example\]](#)
4. Annotate your figures with arrows, highlights, etc. [\[Example\]](#)

# Slide rules.

No unexplained equations or notation.

“Yes, but I *need* this notation.” lol ok, but do you really?

# PANFLUTE FLOWCHART



# Slide rules.

No unexplained equations or notation.

They cost attention but provide precision. Consider the tradeoff.

Exceptions:

Audience affects the tradeoff. Physics department vs Sociology department.

Use in “job talks” where you *need to signal* credibility and rigor.

Use to combat “lightweight” bias\* of audience. Do not overcompensate. [\[Example\]](#)

\*Real talk: if you don't have “rigorous looking” equations, some types of people will not take you seriously. Ridiculous & frustrating? Yeah. Still, worth considering.

# Slide rules.

No small fonts.

Except for footnotes and citations.

# Slide rules.

Put mini-figures on the conclusions slide.

Particularly useful for long talks. [\[Examples\]](#)

# Slide rules.

Use a consistent theme and fonts.

“What would Sam Way do?”

 gives awesome talks

# Slide rules.

No unexplained figures.

No unexplained equations or notation.

No small fonts.

Use a consistent theme and fonts.

Put mini-figures on the conclusions slide.

Aspect ratio: widescreen only. It's ~~2019~~.  
20



# Tips for giving good talks.

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← TL;DR:

- practice!!
- not too fast
- pause; eye contact;  
read your audience
- psych 101: don't make  
us choose you vs. slides

<skip>

# What should you say?



**Step 1:** List what you *need* to say for each slide.

Then review your list.

Each slide is a story. **Revise each slide** till you naturally link its plot points.

If you think you'll forget something, **place a cue** on the slide. [\[Example\]](#)

If there is key wording, **write exact wording** on the slide. [\[Example\]](#)

Note: figures are a prepackaged story: **tell figures start to finish.**

# Transitions are as important as content



**Step 2:** Plan every transition.

What will you say before clicking “next”?

Set audience expectations, and then meet or defy them.

Say it before clicking! Never talk through a transition.

Fun experiment: watch people’s eyes at slide transitions. They’re *never* on the speaker!

# Practice and revision are fundamental.



**Step 3:** Talks don't get worse with practice. Ever.

A. Make the slides, talk them through, solo, start to finish.

B. Edit the slides, rehearse the talk. Time it. [Repeat]

C. Present it like you mean it to video or a friend. Time it.

Note: Giving a first-draft talk is disrespectful. Don't do it!

D. Listen to the feedback. Make changes. Hit step B again.

Asking for feedback and then ignoring it is wasteful. Don't do it!

E. Apply extra polish to the intro, conclusions, and transitions.

# Equip yourself with **delivery tools**

No. Not laser pointers. Don't use a laser.

- Speed.
- The pause.
- Loud vs medium.
- Warmth vs authority\*.
- Eye contact (and intentional looking away).
- Pitch—consider mean & variance. [beware uptalk]
- Body movement. Head, hands & arms [the box], and legs.
- Turn it up to 11.
- Special effects\*\*. The echo. The slow walk. The double pause.



**Step 4:** Plan a couple delivery tools.

# Equip yourself with **delivery tools**

No. Not laser pointers. Don't use a laser.

- **Speed.** Finishing under time at 1000 words/minute can be as bad as running over time at a regular pace. Experiment with speed.
- **The pause.** Try a pause to let your last statement sink in. Doubles as built-in water break. Feels longer to you than to audience!
- **Loud vs medium.** Again, experiment, but err on the side of more volume, not less.
- **Warmth vs authority\***. Next conference, notice how speakers tend to fall somewhere on an axis between warm & authoritative.
- **Eye contact (and intentional looking away).** More is better, generally. As with the others: experiment!
- **Pitch—consider mean & variance. [beware uptalk]** Opinions vary re uptalk. I suggest avoiding.
- **Body movement. Head, hands & arms [the box], and legs.** Experiment! Try a new move!
- **Turn it up to 11.** Enthusiasm is fun for you and the audience. Record yourself and cringe at how your 11 is IRL a 4.
- **Special effects\*\*.** The echo. The slow walk. The double pause. Advanced moves. 😎

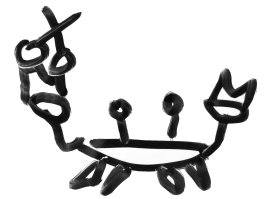


## **Step 4: Plan a couple delivery tools.**

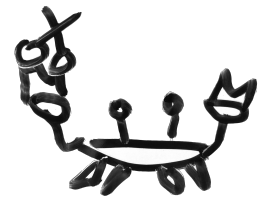
# How to improve efficiently.



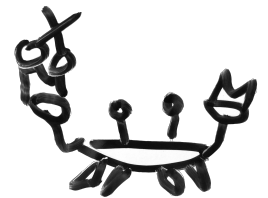
**Step 1:** List what you *need* to **say** for each slide.



**Step 2:** Plan every **transition**.



**Step 3:** Talks don't get worse with **practice**. Ever.



**Step 4:** Plan a couple **delivery tools**.

Recommendation: hit step 4 before the day of the talk.

# Tips for giving good talks.

</skip>

1. Philosophy, structure, and strategy.
2. Slide rules so your slides rule.
3. How to improve efficiently.
4. **Game day tips.**



# Things to do before you stand up.

Take 10-15 mins of time to yourself.

Look at the ocean.

Flip through your slides.

Review your transitions.

Breathing exercises.

Pushups.

Epic music. Chill music.

Whatever. You do you.

Upload your slides as a PDF to an easy URL.

It's 2020 (basically). No excuses. Always have a backup.

# Things to do **when you stand up.**

Always use the mic.

“Do I need the mic?” produces more false negatives than false positives.

Keep the lights on.

You are exciting and beautiful but people *will* fall asleep if it's dark.

Finish early but not too early.

Do not run over time. Just do not.

[And if you do, have an exit strategy: know ahead of time what to skip, & don't mention that you're out of time. Just finish victoriously as soon as you coherently can.]

# Things to do **after you sit down.**

## Debrief

What worked well and what didn't?

*well...*

[Suggestion: do not ask other people. They'll lie or you'll be upset. Answer these questions *for yourself*, with a "getting better takes work!" attitude.]

## Learn from the greats

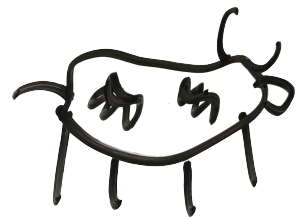
If you ever see a talk you like, reverse engineer it.

✓ *like this one!*

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**Step 2:** identify *your cargo* and write it down.



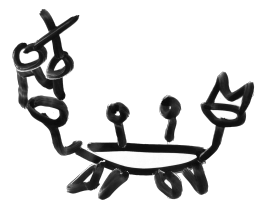
**Step 3:** model *your audience*, and write that down.

**Step 4:** *budget + topic sentence* for each slide.

**Step 5:** *refine & enhance* with narrative & “Aha!”

---

**Step 6:** List what you *need* to *say* for each slide.

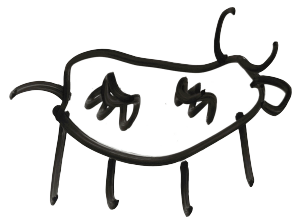


**Step 7:** Plan every *transition*.

**Step 8:** Talks don't get worse with *practice*. Ever.

**Step 9:** Plan a couple *delivery tools*.

# Workshop #4: Giving a Talk.



## Further Reading:

- [LeeAundra Keany](http://thecontrarypublicspeaker.com/) is wonderful. <http://thecontrarypublicspeaker.com/>
- [Paul Edwards'](http://pne.people.si.umich.edu/PDF/howtotalk.pdf) fantastic notes: [pne.people.si.umich.edu/PDF/howtotalk.pdf](http://pne.people.si.umich.edu/PDF/howtotalk.pdf)
- [Your suggestions here. Email me [daniel.larremore@colorado.edu](mailto:daniel.larremore@colorado.edu)]

