Giving a Good Presentation

Hints and Tips

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Why Bother?

- Promoting your work and yourself
- Building a network (people with similar interests): useful for development in any field
- Good practice not just for a teaching career but for any career (e.g., future interviews)
- Helps you sort out your work and better understand it

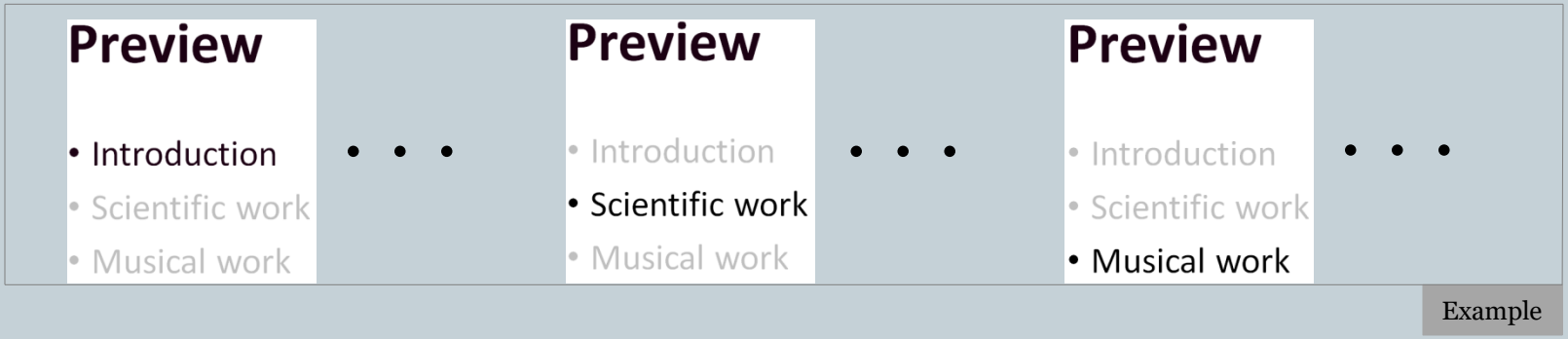
Things you Should Know Before the Presentation

- Audience (background and number of participants)
- Given Duration
- Purpose and other Presenters
- Venue
- Hardware and Software available
- Q & A

Outline

It's all about the storytelling!

- Introduce yourself and the title of your talk (1 slide)
  Greetings, Subject/Title, Name/Position/Affiliation
- Forecast (1 slide)
  What's the problem in a nutshell
- Preview (1 slide)
  About the Presentation / Contents



Example

Example for a 15-20mins presentation

Outline

It's all about the storytelling!

- Introduce yourself and the title of your talk (1 slide)
  Greetings, Subject/Title, Name/Position/Affiliation
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  About the Presentation / Contents
- Background

i. Why is this important / Motivation (1-2 slides)
ii. Related works (0-2 slides)
iii. Your approach explain why it is better/sexier than the previous works (1-3 slides)

Example for a 15-20mins presentation

Outline

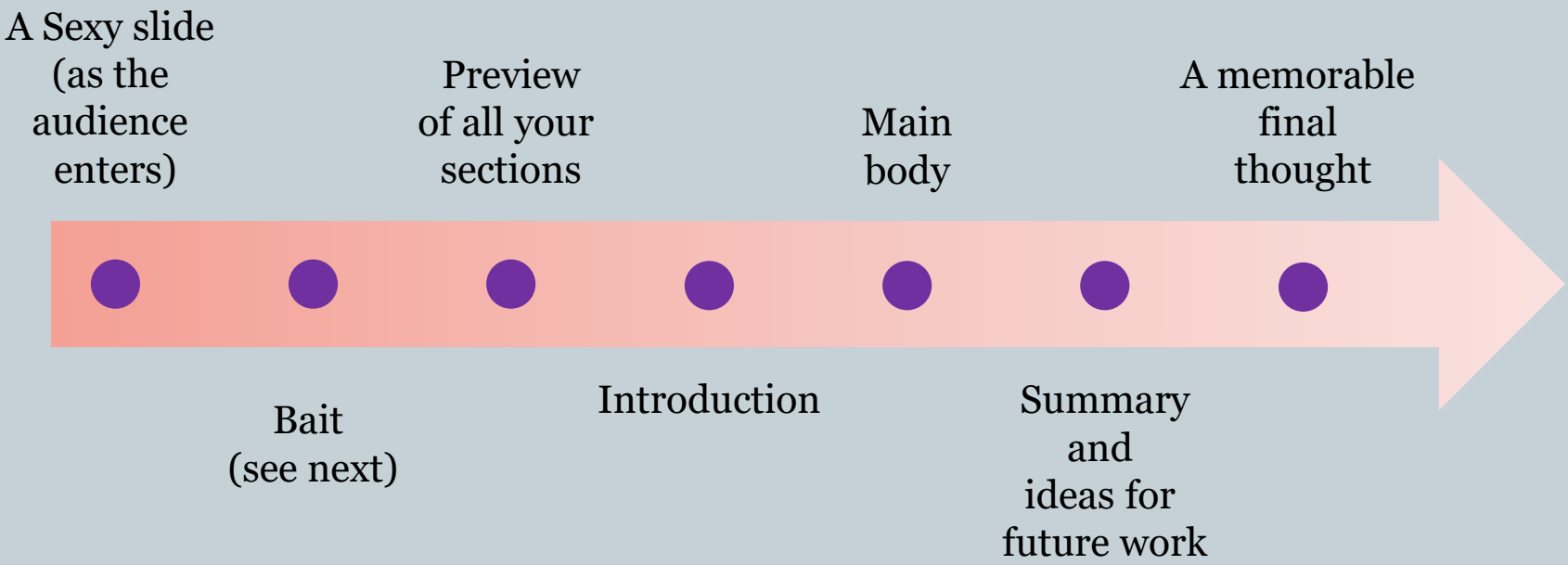
It's all about the storytelling!

- Results (3-8 slides)
  Key insights / DO NOT try to show ALL results
- Summary (1 slide)
  Few things to take back home (3-4 points)
- Future Work (1 slide)
  Potential future projects/applications this work enables
- Backup Slides (0-5)
  Few slides incase of a question that it is easier explained with a slide

Example for a 15-20mins presentation

Flow

It's all about the storytelling!



Do

- Show you are enthusiastic about the project and clearly point out the reasons
- Use LARGE text / BIG images / plots with THICK lines
- Make eye contact, talk loud and clear
- Clear structure of what you are going to present
  Preview engage the audience / remind the audience the Preview slide by highlighting the current chapter
- Outline a Framework of Key Points
  Have a single main point and the rest will support it and drive the audience home

Do

Your results VS Relevant works

factual data NOT how you feel about your work

	Field control	Spatial resolution	Obstacle Avoidance
Transducer Pair [5,18]	Dynamic (reduced)	Low	N/A
Transducer Array [6,12,21]	Dynamic	Low	N/A
Metamaterial [30,45]	Static	High	Static
Hybrid Approach (SoundBender)	Dynamic	High	Dynamic

Table 1. Related approaches and relevant features.

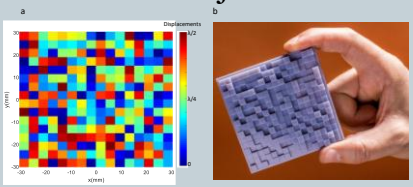
Example from paper: Norasikin, M. A. et al. SoundBender: dynamic acoustic control behind obstacles. In The 31st Annual ACM Symposium on User Interface Sofware and Technology 247–259 (ACM, 2018).

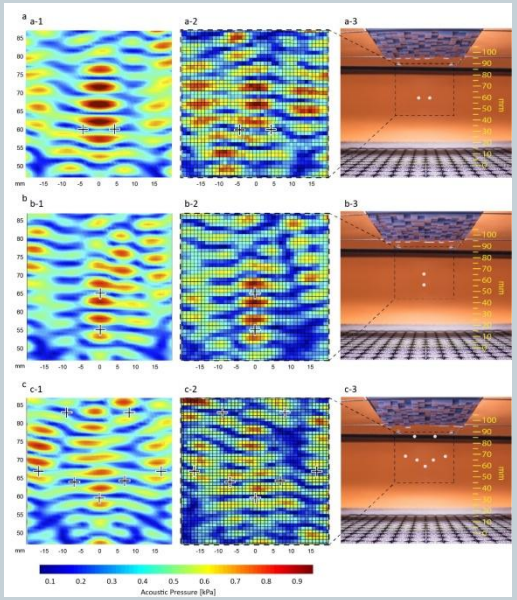
Do NOT

- Do NOT Have Text-Heavy Slides
  Use keywords and bullet points to remind you all the things you want to address

Do NOT

In order to create levitation conditions (i.e., “traps”) at predefined points in the space between the transducer and the metamaterial (i.e. the “cavity”), the pressure at these locations needs to be minimized, while simultaneously finding a stable value of the acoustic force[28] (i.e., a zero for its gradient, related to the Laplacian of the Gor’kov’s potential U). The minimization of the objective function (equation (2)) is fulfilling the above requirements for multiple points ($j = 1,2,\dots,J$). For nonlinear problems where finding an approximation of the global optimum is more important than finding a more precise local optimum, simulated annealing (SA)[52] stochastic optimizer is preferable to alternatives, such as gradient descent[52]. Therefore, in our method we incorporated SA to minimize the objective function





$$e_1 = i\left({}^{ka_p}/_{\omega}\right) j_n'(ka_p),$$
$$e_2 = -i\left({}^{\rho_0}/_{\rho_p\omega}\right) k_S^2 a_p^2 j_n(ka_p),$$
$$d_{11} = -i\left({}^{ka_p}/_{\omega}\right) h_n^{(1)'}(ka_p),$$
$$d_{12} = k_L a_p j_n'(k_L a_p),$$
$$d_{13} = n(n+1) j_n(k_S a_p),$$
$$d_{21} = i\left({}^{\rho_0}/_{\rho_p\omega}\right) k_S^2 a_p^2 h_n^{(1)}(ka_p),$$
$$d_{21} = i\left({}^{\rho_0}/_{\rho_p\omega}\right) k_S^2 a_p^2 h_n^{(1)}(ka_p),$$
$$d_{22} = -4k_L a_p j_n'(ka_p) + \left[(2n(n+1) - k_S^2 a_p^2)\right] j_n(k_L a_p),$$
$$d_{23} = 2n(n+1)\left[k_S a_p j_n'(k_S a_p) - j_n(k_S a_p)\right],$$
$$d_{32} = 2\left[j_n(k_L a_p) - k_L a_p j_n'(k_L a_p)\right],$$
$$d_{33} = 2k_S a_p j_n'(k_S a_p) + \left[(k_S a_p)^2 - 2n(n+1) + 2\right] j_n(k_S a_p)$$

$$p_d^{(m)}(\boldsymbol{r}, \boldsymbol{r}_m) = p_0 \frac{J_1[ka_T \sin\theta(\boldsymbol{r}, \boldsymbol{r}_m)]}{ka_T \sin\theta(\boldsymbol{r}, \boldsymbol{r}_m)} \frac{e^{ikd(\boldsymbol{r}, \boldsymbol{r}_m)}}{d(\boldsymbol{r}, \boldsymbol{r}_m)}$$

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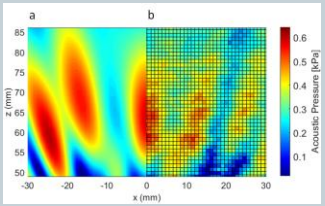

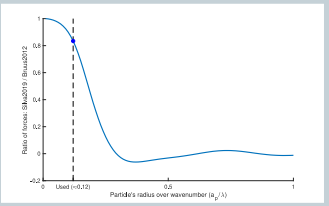

$$p_r^{(n)}(\boldsymbol{r}, \boldsymbol{r}_n) = \frac{ika_x a_y p_0}{2\pi} \frac{e^{ikd(\boldsymbol{r}, \boldsymbol{r}_n)}}{d(\boldsymbol{r}, \boldsymbol{r}_n)} e^{ikz_n} sinc\left(\frac{ka_x(x - x_n)}{2d(\boldsymbol{r}, \boldsymbol{r}_n)}\right) sinc\left(\frac{ka_y(y - y_n)}{2d(\boldsymbol{r}, \boldsymbol{r}_n)}\right)$$

Do NOT

- Do NOT Have Text-Heavy Slides
  Use keywords and bullet points to remind you all the things you want to address
- Do NOT Read text from the slides
  Explain in more detail the points shown in the slides verbally
- Do NOT confront members of the audience
  Be polite when you answer / Remember they are there because they care / Do not be arrogant
- AVOID complicated equations
  Explaining concept without equations wherever possible

Be Extra Careful

- Slide Transitions, Sound Effects and Colors
  DANGER: They can become the focus of attention
- Presentation Templates
  They force you to fit your original ideas into someone else's pre-packaged mold
- Be consistent
  Use the same terms, symbols and notations for the same things thought the whole presentation
- Faith in Technology
  Have a backup plan incase things go wrong (USB flash drive, cloud, etc.)

Practice

- Practice with a timer
- Practice by yourself
- Practice in front of colleagues and friends
- Practice in front of a webcam (watch footage later as painful as that may be!)
- Adopt effective speakers' successful habits that fit your personality

Practice

Practice — But Not Too Much

Preparation minimizes the Anxiety

BUT

Over-rehearsing can ruin the natural element of your talk and you might come across like you are reading a text

Practice until you feel comfortable enough to go live

Thank you for your attention