

How to give a talk

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Outline

- **Preparation**
- Presentation

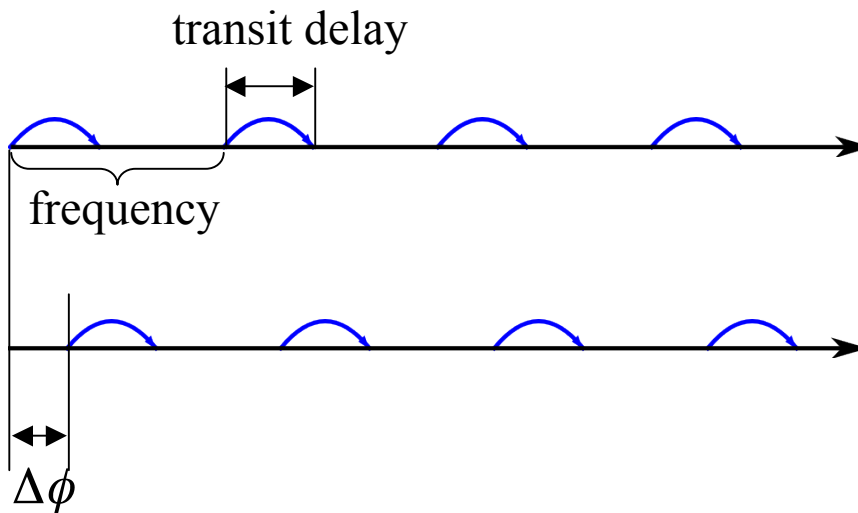
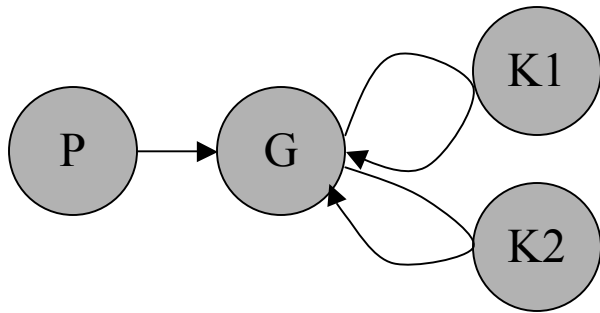
Rule 1: Tell a story

- Background
 - “Once upon a time, ...”
- Problem
 - “The ogre ate all the apples, so the children went without...”
- Solution
 - “The anti-ogre fence...”
- Evaluation
 - “Ogre infestations declined 58% over 5 years...”
- Conclusions
 - “We recommend anti-ogre fences”

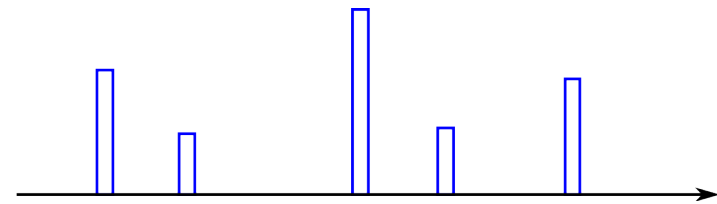
Rule 2: 1-2-3 rule

- **One** idea per slide

Microbenchmarks



Traffic Model: Batched Poisson



load = mean batch size / mean batch interval

Load	0.45
Allowed Rate	0.5
Frequency	12 / day
Transit Delay	60 min
$\Delta\phi$	180°

Rule 2: 1-2-3 rule

- **Two** minutes per slide
- 30 minute talk: no more than 15 body slides
 - unless very sparse
 - like this talk!

Rule 2: 1-2-3 rule

- At most **three** topics
 - figure them out first
 - depends on the nature of the audience
 - work backwards

Rule 3: Use outlines

- Outlines show *connections*
 - as important as the details
- Start with an outline
- Repeat the outline or section title for each section
 - 'roadmap'

Rule 4: Use few words

- "Words on presentation slides are a very good idea, but only when the audience is deaf."
 - Prof. W. Cowan, University of Waterloo

For example...

- A lush green valley in the Himalayas, looking down a thousand meters to stepped rice fields by a rushing river



Rule 5: Use friendly fonts and colours

- **KIOSKNET ARCHITECTURE**
- *Downlink Scheduling*
 - ▶ *Problem Definition*
 - ▶ *Existing Approaches*
 - ▶ *Our Solution*
 - ▶ *Simulation*
- *Implementing the KioskNet System*
- Especially for graphs

Rule 6: Never show tables when you can show graphs

Table 4. Cases of meningococcal disease in Dublin 1998 by area of residence

Area	Cases	
	n	%
1	2	5
2	1	3
3	2	5
4	2	5
5	8	22
6	7	19
7	10	27
8	2	5
9	2	5
10	1	3
Total	37	100

The area map



Rewl 7: Typoos relfect porely on ur comptence

Rule 8: Use examples

- As in this talk!

Rule 9: Avoid colloquialisms

- It's like, duh

Rule 10: Describe related and past work

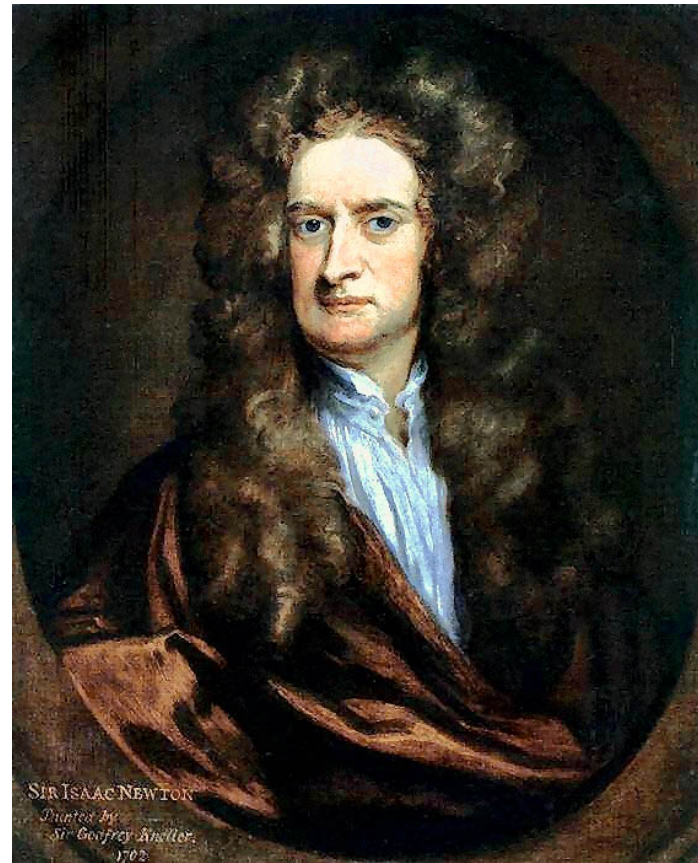
“If I have seen further it is only by standing on the shoulders of Giants.”

Isaac Newton

Rule 4 & 10: Describe related and past work

“If I have seen further it is only by standing on the shoulders of Giants.”

Isaac Newton



Rule 11: Talk about your contributions

- Don't make the audience guess what they are

Rule 12: Highlight insights

- The story behind the work is what audiences come to talks for
 - What didn't work? Why?
 - What would you do differently next time?

Rule 13: End with a summary slide

- Leave it up on the screen when you stop for questions

Outline

- Preparation
- **Presentation**

Rule 1: Talk to the audience, not the screen

- Scan the audience, see if they are understanding
- Pace your talk

Rule 2: Never read from notes

- Expand from 'headlines'

Rule 3: Walk audiences through formulae

$$\log N^*(t) = \log \left(\prod_{i=1}^n N^i \left(\frac{t}{\sigma} \right) \right) = \sum_{i=1}^n \log \left(N^i \left(\frac{t}{\sigma} \right) \right) \approx \sum_{i=1}^n \log \left(1 + \frac{(\sigma^i)^2}{2} \left(\frac{t}{\sigma} \right)^2 \right) \quad (\text{EQ 14})$$

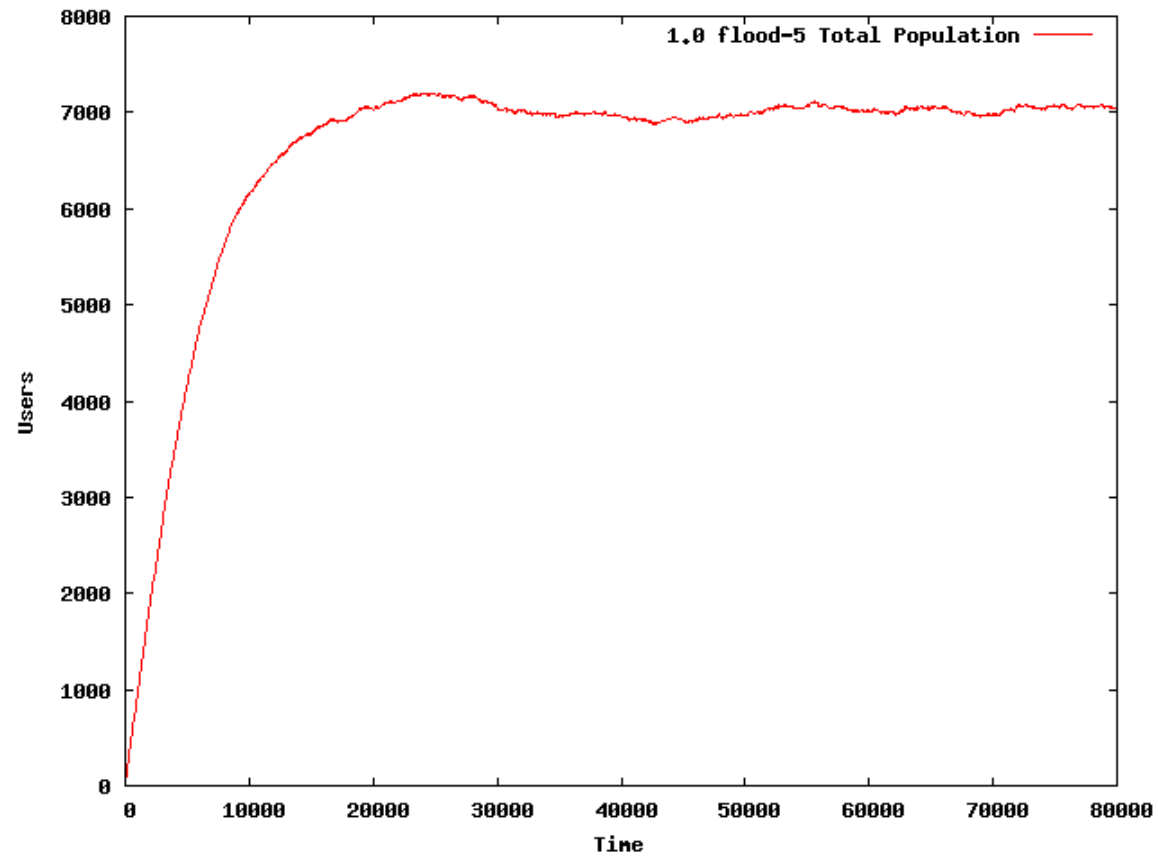
It is easily shown by the Taylor series expansion that when h is small (so that h^2 and higher powers of h can be ignored) $\log(1+h)$ can be approximated by h . So, when n is large, and σ is large, we can further approximate

$$\sum_{i=1}^n \log \left(1 + \frac{(\sigma^i)^2}{2} \left(\frac{t}{\sigma} \right)^2 \right) \approx \sum_{i=1}^n \frac{(\sigma^i)^2}{2} \left(\frac{t}{\sigma} \right)^2 = \frac{1}{2} \left(\frac{t}{\sigma} \right)^2 \sum_{i=1}^n (\sigma^i)^2 = \frac{1}{2} t^2 \quad (\text{EQ 15})$$

where, for the last simplification, we used Equation 10. Thus, $\log N^*(t)$ is approximately $1/2 t^2$, which means that

$$N^*(t) \approx e^{\frac{t^2}{2}} \quad (\text{EQ 16})$$

Rule 4: Always introduce graph axes



Rule 5: Speak slowly and clearly

Rule 6: Respect questioners

- Hear questions fully
- Defer them if needed

Rule 7: Practice makes perfect

- Practice a talk at least three times
- Talk in front of a mirror
- Have it videotaped, if possible

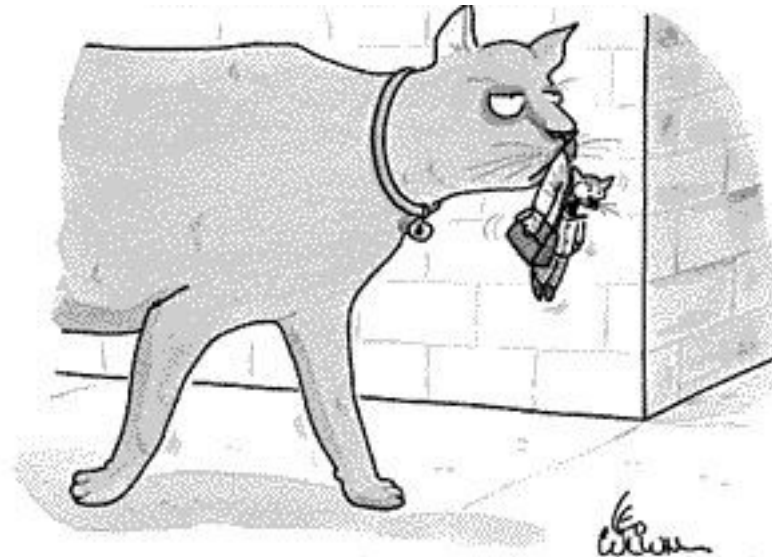
Rule 8: Arrive early

- Test your laptop or better yet, borrow one
- Bring a memory stick
- Do the talk on a white/black board if necessary

Rule 9: Bring a pointer

- Laser, stick, or pen

Rule 10: A little humour goes a long way



"This is humiliating. Couldn't you drop me a block from school?"

From *The New Yorker*

Rule 11: End on time

- Keep track of the time

Summary

- Rule 1: Tell a story
- Rule 2: 1-2-3 rule
- Rule 3: Use outlines
- Rule 4: Use few words
- Rule 5: Use friendly fonts and colours
- Rule 6: Never show tables when you can show graphs
- Rule 7: Typos reflect poorly on your competence
- Rule 8: Use examples
- Rule 9: Avoid colloquialisms
- Rule 10: Describe related and past work
- Rule 11: Talk about your contributions
- Rule 12: Highlight insights
- Rule 13: End with a summary slide
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