

# **How (not) to Give a Talk in a Seminar**

**Thomas Gross**

# Outline

- **A talk on what?**
- **General comments**
- **Example(s)**
- **Related work**
- **Conclusions**

# Seminar talks

- **Practice scientific presentation**
  - Based on primary literature
    - » Articles in journals, papers at conferences
    - » Find additional (relevant) material
  - Engage in discussion with audience
- **Practice scientific exchange**
  - Learn to ask questions to clarify misunderstandings
  - Learn to ask questions to fill in missing knowledge
  - Reflect on contents
    - » Do you have supporting evidence?
    - » Do you have *conflicting* evidence?

# Seminar talks

- **You talk about some else's work**
  - Not advocate but investigative reporter
- **Understand the topic**
  - Read intro material/paper
  - Read referenced work, other papers, consult assistant if you have questions
  - Explore topic on system
- **Plan presentation**

# Understand a paper

- **Read paper once**
  - Don't stop if you don't understand everything
  - Skip formulas and complicated figures
- **Do you need background info??**
  - Get it

# Structure of many papers

- **Introduction**
  - What is interesting/relevant?
- **Problem statement**
  - What problem is solved by the authors
- **Solution to problem**
  - Algorithm
  - Software system
  - Hardware/software system
- **Evaluation**
- ***Related work***
  - Previous (partial) (non) solutions
  - Other problems that might be confused with this problem
- **Conclusions**
  - Implications

# Understand a paper

- Read paper once
  - Don't stop if you don't understand everything
  - Skip formulas and complicated figures
- Do you need background info??
  - Get it
- Read paper again
  - Carefully
  - Mark/record parts that you don't understand
- Get help on parts you don't understand
  - More background material
  - Search internet
  - Ask professor, assistant (or friends)

# Contents of the paper

- **What is the paper about**
- **Write a 1-3 sentence summary of paper**
  
- **What problem(s) do(es) the paper attempt to solve/address**
  
- **How does the paper support its claims?**
  - **Simulation**
  - **Measurement**
  - **Theory/Reasoning**
  - ...



# Assessment of paper

- **Do you believe the author(s)?**
  - Rational arguments in the paper
  - Do the data support the claims
- **What are the key ideas/findings**
- **Talk: presentation+reflection**
  - Contents of paper (not all – key ideas)
  - Critique
  - Assessment
    - » Important idea? Why?
    - » Incremental work?
    - » Bogus?

# Seminar presentations

- **Many approaches**
- **One paper**
  - Reflect, put into context
- **Two papers**
  - Contrast
  - Compare
- **Are there other papers?**
- **Is this paper's work superseded by other work?**
  - By technology?

# Planning your presentation

- **Determine content of presentation**
- **What is your assessment?**
- **Prepare presentation**
  - Audience
  - Length

# Slides

- **Should support your presentation**
  - Good for complex ideas/topics
  - Require preparation
    - » Danger: you steamroll your audience
- **Slides are not be be used to**
  - Capture all the details
  - Allow a code inspection by the unsuspecting audience
  - Serve as a summary
  - Be your notes

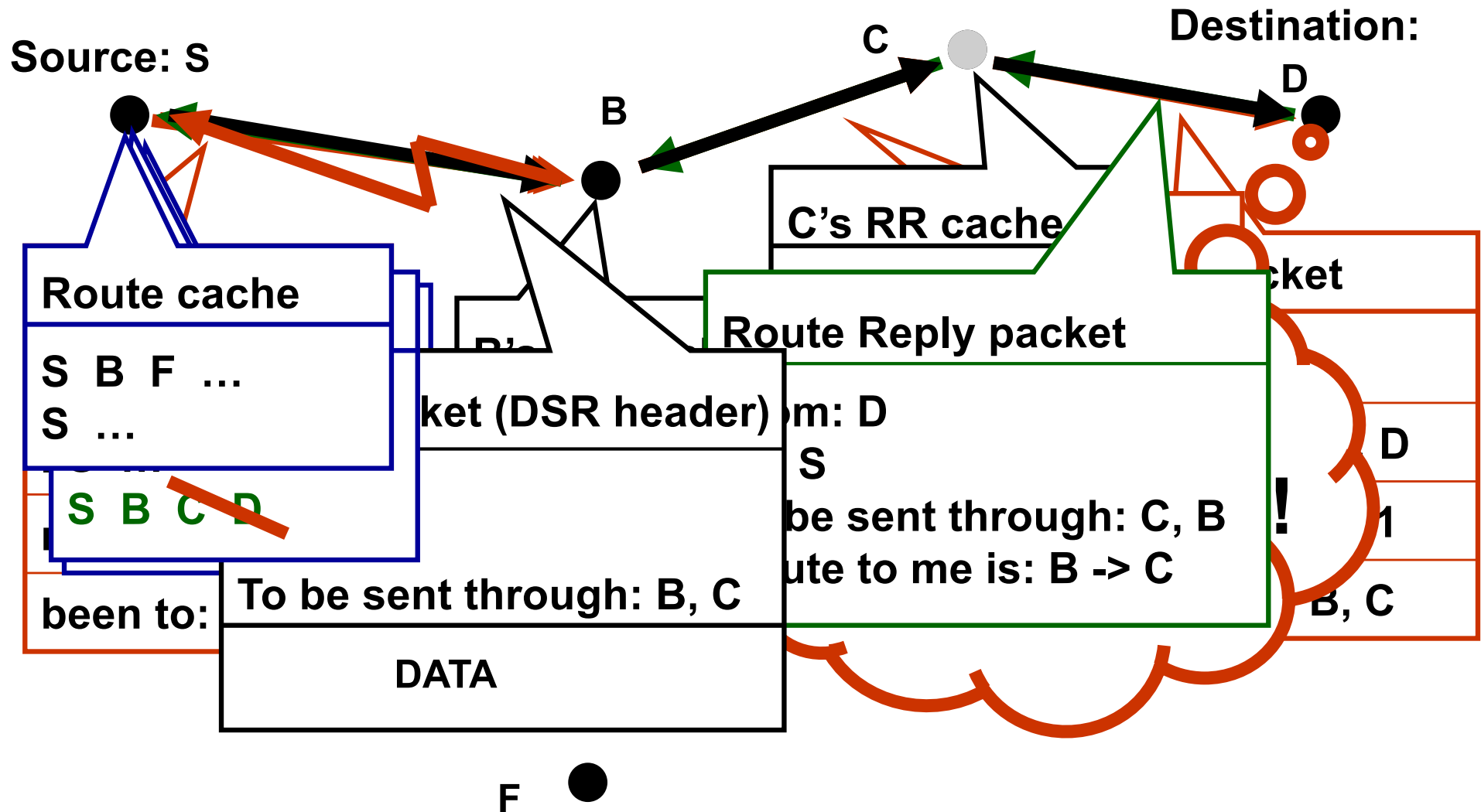
**"Secondly, don't get so caught up in the promise of tomorrow that you ignore the quality of life today. If you're lugging cable on some godforsaken shoot at 5 a.m. while an egomaniac who knows half of what you do talks to some guy who couldn't act his way out of a paper bag about his motivation for slashing up the next coed and you're hating it, just hating it, take no comfort in the thought that someday soon you'll be rewarded with your big break into the real film industry. This *is* the real film industry, especially if the doughnuts are stale."**

**-- John Sayles**

# Slides

- **Perfect is the enemy of good enough**
- **Not every talk must be a performance**
- **Optimize your time**
  - You can write your slides by hand
    - » No penalty – but slides must be readable!
  - Don't clutter slides with details
    - » Optimize the audience's time

# DSR: Route Discovery & Maintenance



# Slides

- **Copying from paper(s) acceptable**
  - Show source(s)
  - Don' t copy from Wikipedia without attribution
- **Careful when showing code**
  - Provide hardcopies if detailed code examples are required



# Presentation details

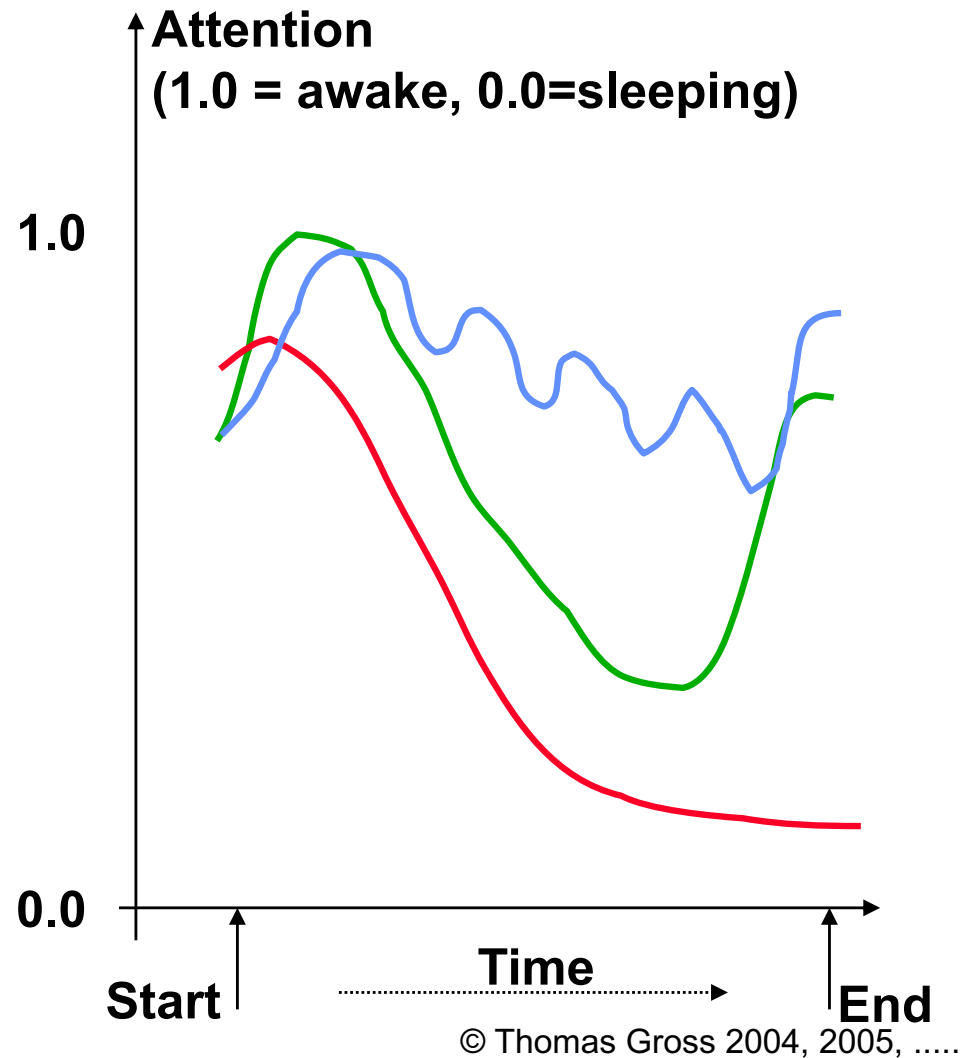
- **Work on your presentation**
- **Dynamic elements a good idea**
  - Do not use fancy features
  - Powerpoint is *not* your friend
  - Animation appropriate for audience
- **Give your audience a hand**
  - First tell them what you' ll tell them
  - Tell them what you want them to know/learn
  - Then tell them what you told them

# Presentation delivery

- **Speak clearly**
- **Face your audience**
  - Eye contact
  - Use presenter tools
  - Don't point to screen
    - May not always be possible
    - Many events use multiple projection devices
    - Use pen/highlighting to point

# Structure of a presentation

- **Motivation/Outline**
- **Problem**
- **Solution**
- **Discussion**
  - Maybe “related work”
- **Summary**
- ***Your* conclusions**
  - Assessment



# Mechanics

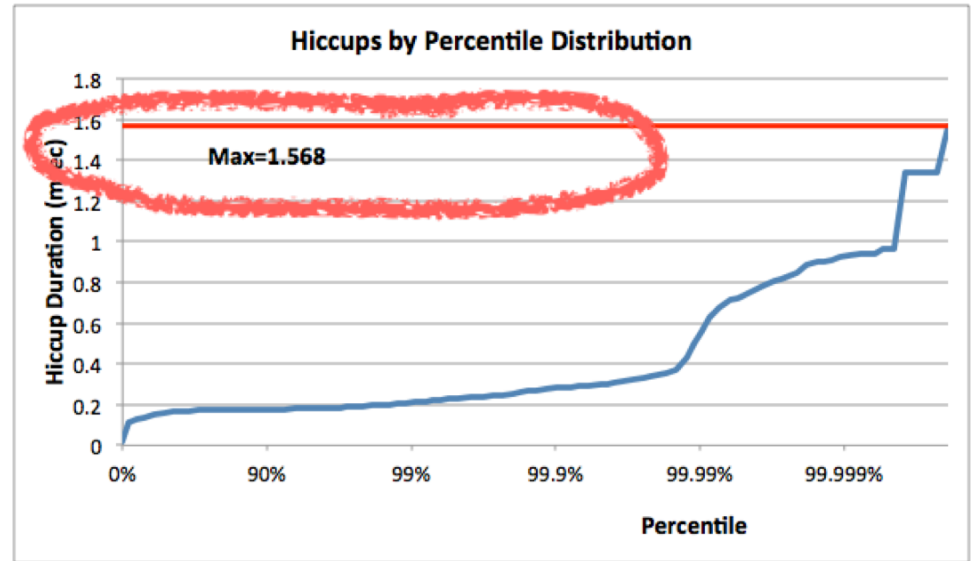
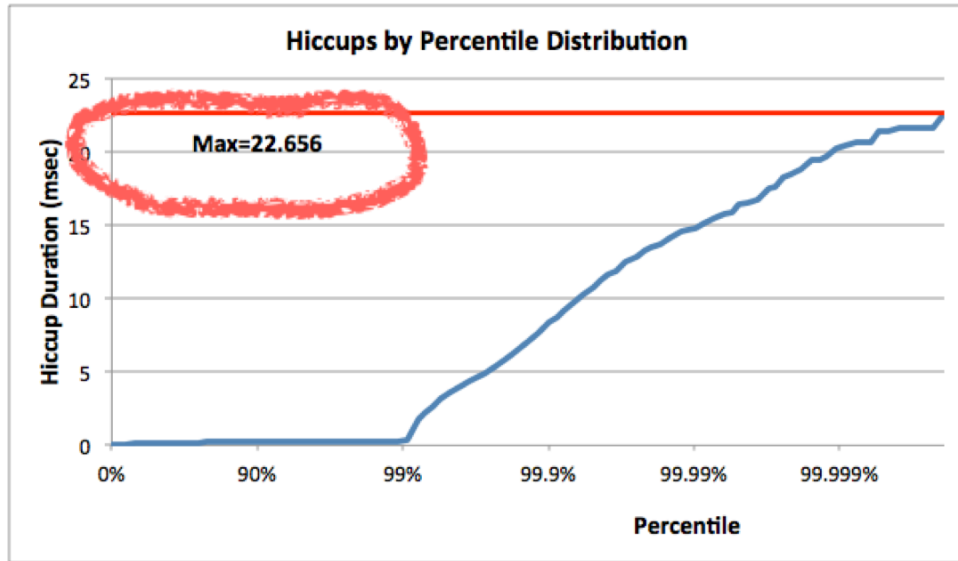
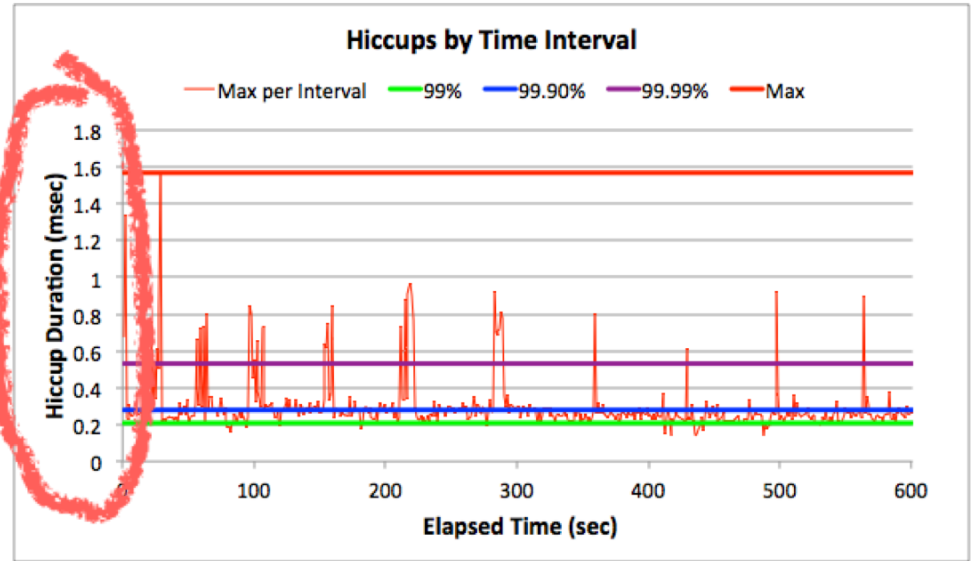
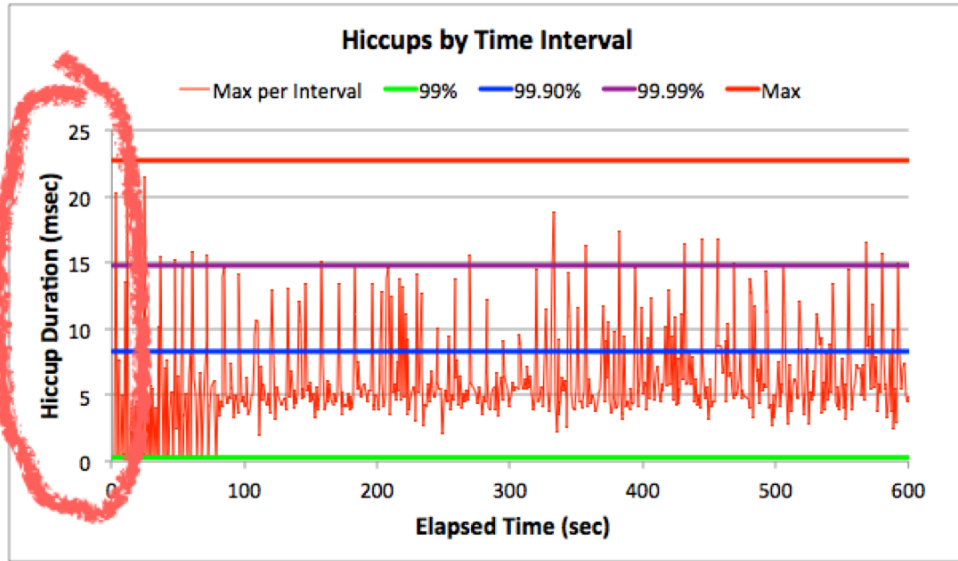
- **Spend your time wisely**
  - Stick to the time budget!
- **Spellchecker - use it if possible**
- **Think content**
- **Plan punch line**
  
- **Important talks: { R e h e a r s e } +**
  - Don't overdo it.

# Mechanics

- **Simple fonts**
  - Sans serif
  - Not Times Roman
- **Large fonts**
- **Organized slides**
  - Not too dense
  - Not the paper
  - Not too sparse
- **Slides are free**
  - One idea on one slide
  - Copy slides, don't reshuffle

# Graphs

- **A good book: Tufte, E. The Visual Display of Quantitative Information.**
- **General principles:**
  - Clarify, don't clutter
  - Show your data
  - Don't cheat or fool (mislead) the audience



# Color

- **Easy to get wrong**
- **Non-uniform color mappings**
- **Non-cooperative tools**
- **Use it wisely**
  - Don't be shy
  - Don't overload
  - Experiment
- **Colorpen sometimes a good alternative**
- **White is not a color**



# Conclusions

- **The most important part of your talk**
- **What should we take away?**
  
- **Important to deliver well**
  - Know this part of your talk by heart
  - Slides support your punch line
  - Get everybody's attention
  
- **Handle questions after the talk**

# Summary

- **Talks require preparation**
  - Sometimes the speaker underestimates the challenges
  - Some papers are not easy to read
- **There is no rule that applies to all situations**
  - Get experience
- **Practice your talk**
  - Timing is hard to get right without practice
  - Know the first few sentences and your last sentences by heart

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