Scientific Ethics and Exposition
科学规范与表达

清華大學

Lecture 4
Communications and Documentations

Xuegong Zhang
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Types of Scientific Expositions

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- Research notes, memos
- Letters, emails, weekly reports, technical reports
- Oral presentations (talks, lectures, speeches)
- Poster presentations
- Conference abstracts, papers
- Journal papers (multiple sub-types)
- Books (monographs, textbooks)
- Grant applications
- Thesis, dissertations
- …

Composition is the placement or arrangement of visual elements or ingredients in a work of art

All types of expositions need to be **composed**.

Composition: 创作/写作/构图/作曲

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Emails
as scientific/professional communications

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Anything "wrong" in these emails?

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- What do you read from these two pieces of email communications?
  - Student: …… Can I talk with you on it tomorrow?
  - Professor: My schedule is quite full tomorrow. How about Wednesday, say at 2pm?
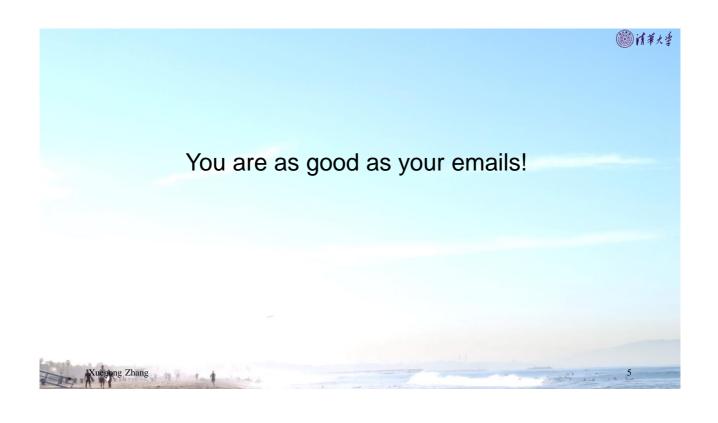 - Student: I'm sorry that I have a class on Wednesday 1:30-3:05pm. Other time is ok for me. Thanks.

++++++++++++++++++++++++++++

  - 本科生甲：张老师，我是xxx系本科生，xxxxx，想到您实验室参加一点科研，xxxxx，您看行吗？
  - 张老师：Let's have some chat first. I'll be available on Wednesday morning. My office is FIT 3-109.
  - 本科生甲：谢谢张老师，我几点来合适？

请思考：
这两段邮件对话里有什么问题？

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You are as good as your emails!

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Watch your emails!

- In the academic world, you are as good as your emails.
    - Be a reliable emailer.
    - Be a considerate emailer.
    - Be a professional emailer.
    - Be a smart emailer.

D

- Pay attention to your email usage!
    - Most direct emails need to be replied.
    - All cc'ed/forwarded emails need to be read. Many need to be responded.
    - Some emails need to be saved.
    - All out-going emails need to be composed!

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  - All out-going emails need to be composed!

Take-home message: Use your mind, be aware, and control everything!

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Some basic conventions

- Subject: brief, clear, attractive, in receivers' language
- Title of the addressee:
  - Official communications:
    - *Dear Dr./Prof./Ms./Mr. Fullname or Lastname*
    - *Dear Sir/Madam,*
    - *Dear Editor,*
    - *To whom it may concern,*
  - Semi-official: *Dear Firstname*
  - Casual:
    - *Firstname,*
    - *Hi, Firstname,*
    - *Dear Fristname,*
    - *Hi, Doctor/Professor,*
    - *Hi, ...*

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Types of names
- 姓, last-name, surname, family-name
- 名, first-name, given name

Orders of names
- Firstname Middlenames Lastname
- Lastname, Firstname M.
- F. M. Lastname
- Lastname, F.M.

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Some basic conventions

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- Ending words
  - *Sincerely*
  - *Best regards*
  - *Best wishes, With best wishes, With best holiday wishes, …*
  - *Regards*
  - *Thanks*
  - *Best*
  - *Cheers*
  - *Good luck*
  - *Take care*
  - *…*

Your signature
- Avoid using nicknames
- Be considerate in using automatic signatures
- Should match your relation with the addressee
- Show your sincerity

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Some minor points that need attention

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- Email address
  - Use official addresses for work whenever possible
  - Avoid using official addresses for private affairs
  - Double check what your email address will be shown on receivers' end
- Set English as your default language if possible
  - Instead of showing "回复", "转发", etc, show "Re:", "Fw:", etc.
  - Make sure to use English punctuations when writing in English.
- Be thoughtful when writing the subject
  - How can it catch the receiver's eyes?
  - How can it avoid being put into junk boxes?

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How to reply emails

- **Reply timely!**
  - 多么快算是及时？多慢就是不及时了？

  - 你回信的时间间隔(T_0) 与 上司/老师/长辈/同事等回信的时间间隔(T_1)：

  If $P(T_0 > T_1) \geq \alpha,$ *you are in big trouble*!

  $\alpha = 0.05?\ 0.1?\ \cdots\ 0.5?$

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How to reply emails

D

- **Reply timely!**
- Use "Re: xxxxxx" (watch the default language)
  - Keep the original content by default
  - Sometimes you can insert your reply after each paragraph in the original email. Do tell at the beginning of the reply though.
- Pay attention to "Reply to all" and "cc"
  - Know when you should use it or not use it, keep it or change it.
  - 如果原邮件cc给了其他人，你回信时不要去掉，除非你特意要打小报告

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How to reply emails

- **Reply timely!**
- Use "Re: xxxxxx" (watch the default language)
  - Keep the original content by default
  - Sometimes you can insert your reply after each paragraph in the original email. Do tell at the beginning of the reply though.
- Pay attention to "Reply to all" and "cc"
  - Know when you should use it or not use it, keep it or change it.
- Useful words at the beginning of your reply (esp. formal ones):
  - Thanks for your email. …
  - Thanks for your reply. …
  - Thank you very much for your prompt reply. …

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Some minor points that need attention

- Understand conventions in English
  - For example,
    - Something is *good*. = Something is **good**.
    - Avoid using "!" improperly.
    - USING FULL CAPITAL = shouting!
    - Use questions like "Can you …", "Would you …" instead of "Please …" when asking for someone to do something.
- Avoid using figures, tables or long contents in emails. Use an attached file instead and use the email as the abstract.

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More reminders on English

- You attitude is often reflected in the way you say it, rather the use of some single "polite" words
  - The use of words like "please", "thanks", "sorry" etc. does not automatically make your communications polite 有时候这些词是很生硬的
  - Show sincerity from your heart
  - Examples of better ways of expressing "please", "thanks" or "sorry":
    - Can you …?
    - Can/Could you help to …?
    - It'll be very appreciated if you can …?
    - Thank you for your xxx. It really helped a lot!
    - I'm very grateful to you / for your ….
    - I'm very sorry for my carelessness. …
    - …

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CC and Fwd

- CC
  - Carbon Copy   CC是什么意思？请弹幕 D
  - When copies of business letters were so produced, it was customary to use the acronym "CC" or "cc" before a colon and below the writer's signature to inform the principal recipient that carbon copies had been made and distributed to the parties listed after the colon.
  - With the advent of word processors and e-mail, "cc" is used as a merely formal indication of the distribution of letters to secondary recipients.   -- Wikipedia
- Bcc
  - Blind carbon copy
- Fwd
  - Forward

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How about emails in Chinese?

How about WeChat?

Take-home message:
Use your mind, be aware,
and control everything!

Be considerate and use your mind.

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Technical Reports and Research Memo

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The role of writing in research

- Writing is not only the way of sharing your research results.
- Writing is a key part of the research!

Writing papers: model 2

Your idea → Write paper → Do research

- Forces us to be clear, focused
- Crystallises what we don't understand
- Opens the way to dialogue with others: reality check, critique, and collaboration

Simon P. Jones, Microsoft Research Cambridge
How to write a great research paper

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The role of writing in research

- Writing is not only the way of sharing your research results.
- Writing is a key part of the research!
  - When you read a paper, **write** notes.
  - When you listen to a talk, **write** notes.
  - When you have some idea, **write** notes.
  - When you have tried something or have thought about something, **write** a technical memo.
  - When you have done something, **write** a technical report.
  - When you don't understanding something, **write** a technical memo on the things you understand and those you don't.
  - When you don't know what to do, try to **write** a review on any of the topics you had spent time on.
  - …

The faintest writing is better than the best memory!

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How to write technical memos?

- The same algorithm as writing a paper
  - Define your audience, Define your purpose, Do the composition!
- Audience
  - Yourself (the other you)
  - Your advisor and colleagues
- Purpose
  - To clarify your thought
  - To clarify your study design
  - To record all study details
  - To let your "boss" know your progress or problem
  - …

课后自己体会

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How to write technical memos?

- For example, it should include:
  - A title (for easy reference, and for helping to clarify thought)
  - Time, place, person
  - Description of the problem, including the source of the problem
  - Ideas
  - Study design
  - Data
  - Technical details, in such a way that everything **can be reproduced exactly**
- Fix some convention on file naming, format, update period, etc.
- Do not cover or revise existing files. Keep the history even if you find bugs. Add notes on the bugs.

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Example of my early technical memos.

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Example of my early technical memos.

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Example of Xuegong's early technical memos.

Example of experiment notes from Liyang Liu.

Example of Xuesong Lu's technical memo.

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- Books (monographs, textbooks)
- Grant applications
- Thesis, dissertations
- ...

Take-home message:
重视每一次表达、沟通与记录

All types of expositions need to be **composed**.

Composition: 创作/写作/构图/作曲

Composition is the placement or arrangement of visual elements or ingredients in a work of art.

课后自己体会

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休息4分钟