Putting PEN to PAPER

A Short Course for Poverty and Environment Network students wishing to publish appealing poverty and environment research

CIFOR, Bogor, Indonesia
23-28 March 2009

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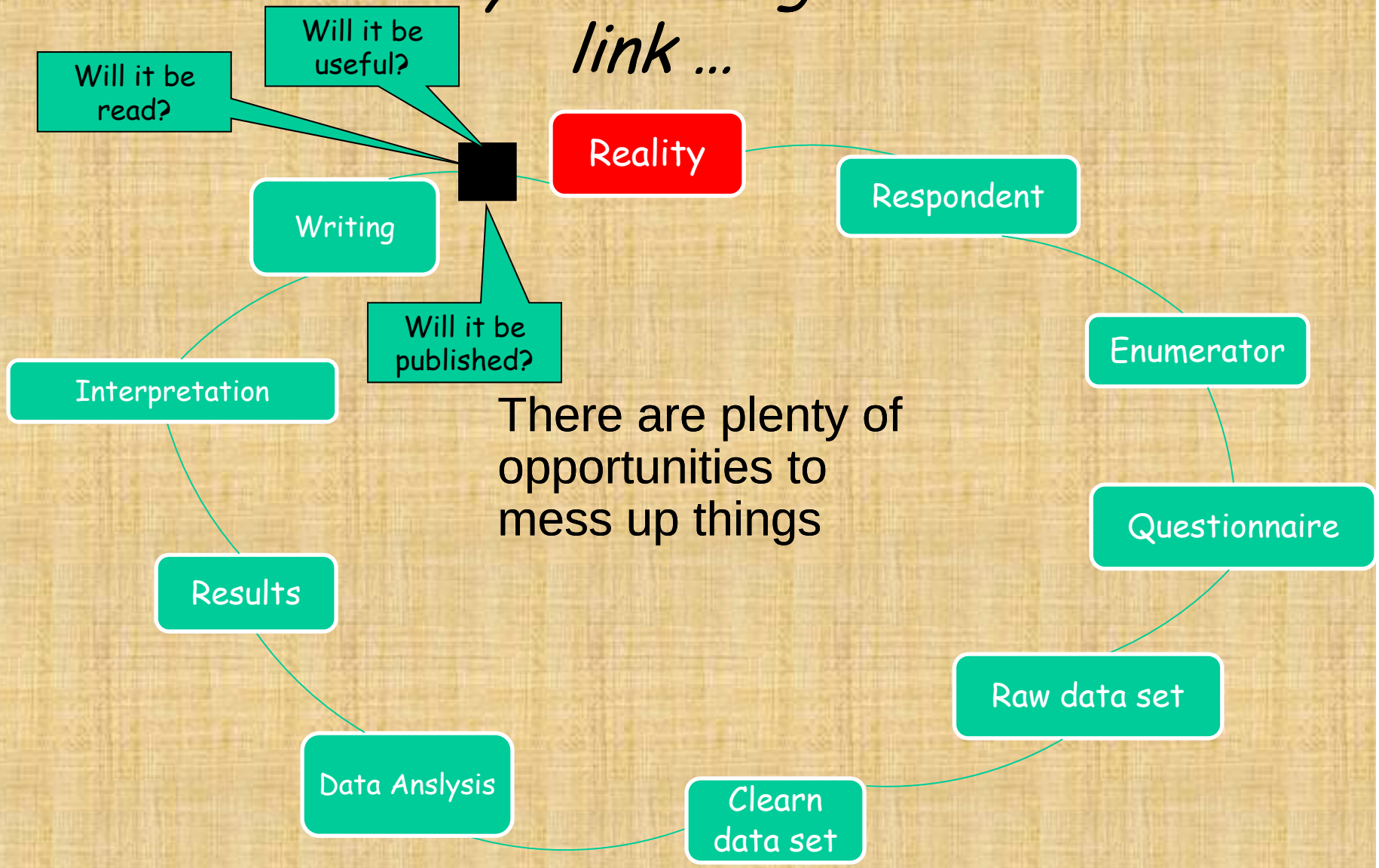
Monday

Session 1

Introduction and Context

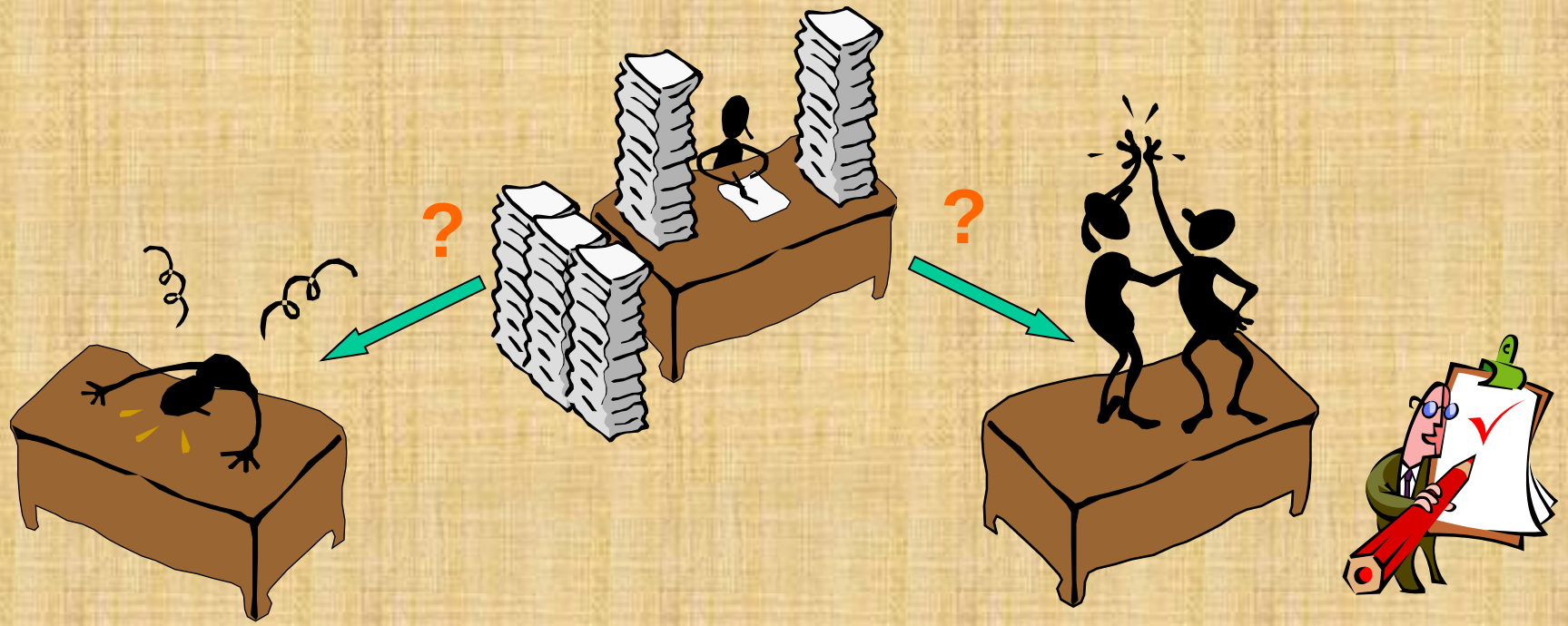
11h00-12h30

… a chain is only as strong as its weakest link …



Course purpose

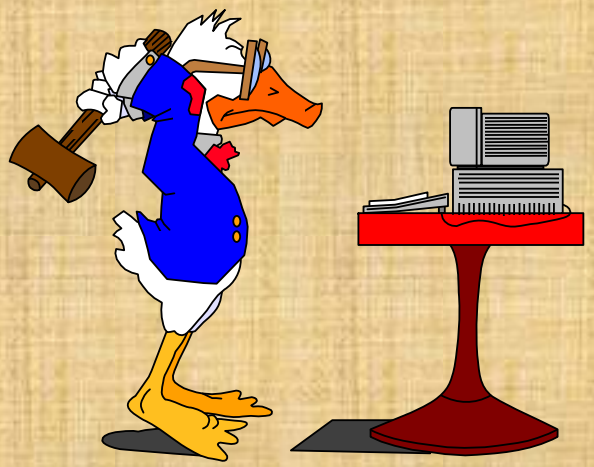
To help you publish the results of your research and thereby make your findings available to other scientists, development agents, policy makers, and planners.



Course objectives

- to improve your ability to write publishable scientific papers
- to reinforce this ability by helping you to prepare a paper suitable for submission to a refereed journal

What kind of outcome do you want?



OR



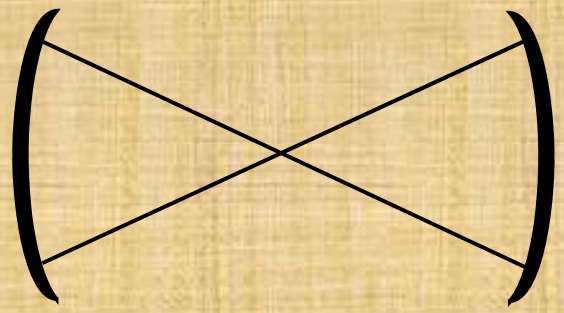
Follow the 'Columbus Principle'?

Be more like Galileo?
Observe closely
Think carefully
Swim against the tide

Overview

"See the end in the mirror of the beginning,
and the beginning in the mirror of the end"

Ancient proverb



WORKSHOP ELEMENTS

- Introduction 1
  - Course
    - Purpose
    - Rationale
    - Structure
  - Science
    - Key features
    - Communication
    - What makes a good scientific paper?
- Scientific Papers 2
  - Structure
    - Components
    - Functions
  - Disciplines
    - Similarities
    - Differences
  - Audience
    - Identify
    - Select journal
    - Follow guidelines
- Getting Started 3
  - Start with the idea
    - Write it down!
  - Evidence?
    - Tables
    - Figures
    - Text
  - Structure
    - Headings
    - Sub-headings
  - Flesh
    - Point by point
    - Focus: SCIENCE

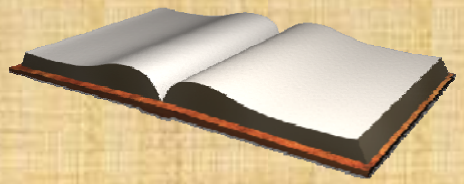


- Writing Clearly 4
  - Simple words
  - Clear composition
  - Active 'voice'
  - Have STYLE
- Final Draft 5
  - Check facts
  - Review arguments
  - Check citations & references
  - Get permission(s), if needed
  - Write and re-write
- Submitting a paper 6
  - What to do
  - What not to do
  - What happens next?
    - Peer review
    - Decision
  - How you should respond
- Ethical Issues 7
  - Authorship
  - Citations
  - IPR
  - Plagiarism
  - Dual and duplicate submission
  - Confidentiality

Communicating science:

why, how, when, and where?









SCIENCE AS A WAY OF KNOWING

PROCESS

ACQUISITION OF KNOWLEDGE

- THROUGH
  - OBSERVATION
  - MEASUREMENT
  - EXPERIMENTATION
- BY BEING
  - METHODICAL
  - RIGOROUS
  - 'OBJECTIVE'

COMMUNICATION

- WRITING
- SPEECH
- IMAGERY

PRODUCT

POOL OF COLLECTIVE KNOWLEDGE

- SYSTEMATIC
- WELL-DESCRIBED
- REPEATABLE/ TESTABLE
- MODIFIABLE
- (PEER REVIEWED)

Nine rules of science (Hengl & Gould 2006)

- Argument and proof, not belief and authority
- Models must fit observed reality, not subjective aspirations
- Not democratic (Sven can be right; everyone else wrong ☺)
- Pluralism, open discussion, speculation all OK; ideas and understanding need to be tested
- Anything is possible; but how probable is it?

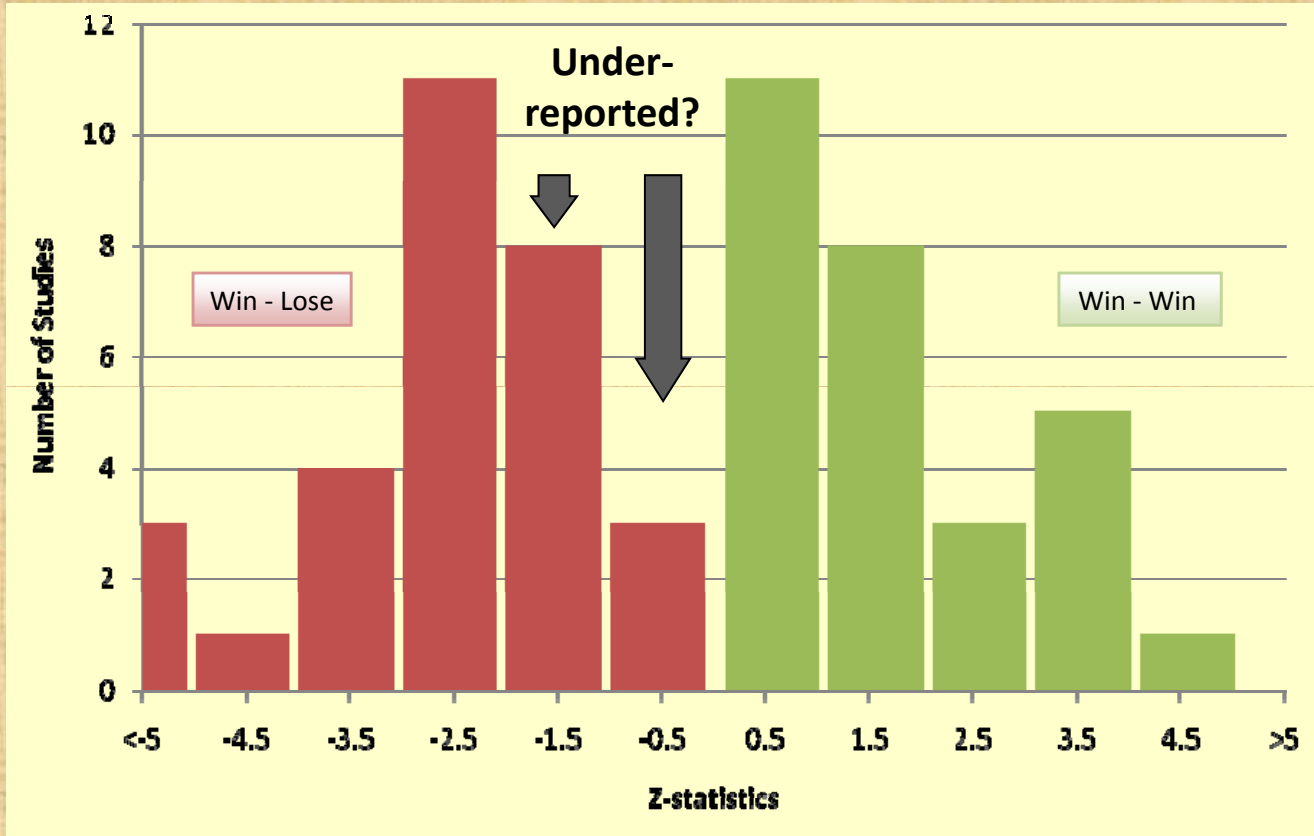
Nine rules of science (Hengl & Gould 2006) *continued*

- Scientific proof: product of repeatable experiments and consistent results
- Reporting research: unbiased, clear, concrete, coherent, and logically structured
- Report research as widely as possible; science does not thrive by being inward-looking
- Science has no final goal or irrevocable theories

These features set science apart from other knowledge systems

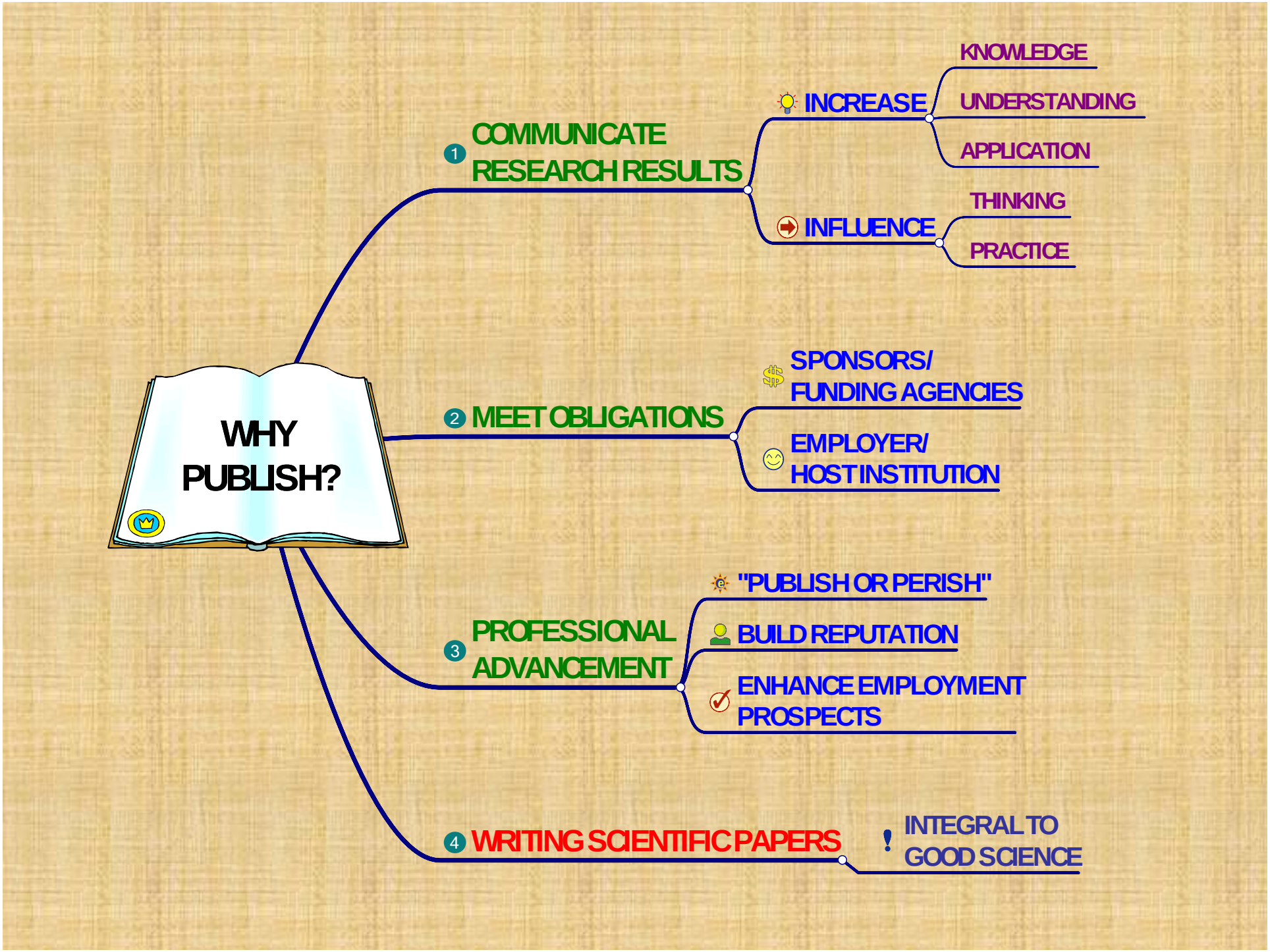
- Tacit (inherent) knowledge
- Experience
- Opinion
- Belief
- Faith
- Myth
- Art

Evidence for biased reporting?



Distribution of Z-statistics among poverty-deforestation studies Green bars: 'Win-Win', Red bars: 'Win-Lose'

(*STIBNIATI ATMADJA & ERIN SILLS*, in prep. *Many Thanks!*)


WHY PUBLISH?
1 COMMUNICATE RESEARCH RESULTS
INCREASE
KNOWLEDGE
UNDERSTANDING
APPLICATION
INFLUENCE
THINKING
PRACTICE
2 MEET OBLIGATIONS
SPONSORS/ FUNDING AGENCIES
EMPLOYER/ HOST INSTITUTION
3 PROFESSIONAL ADVANCEMENT
"PUBLISH OR PERISH"
BUILD REPUTATION
ENHANCE EMPLOYMENT PROSPECTS
4 WRITING SCIENTIFIC PAPERS
INTEGRAL TO GOOD SCIENCE

Why do we write scientific papers?

- For whom do we write papers?
- Are there different kinds of papers? How do they differ?
- Are there different audiences for these papers?
- What are the rewards for writing papers?

Possible audiences for scientific information

- Other scientists
  - working in the same field
  - scientists generally
- Resource managers
- Community groups
- Development agents/extension workers
- Government officials
- "Policy makers"
- The media (newspapers, radio, TV)
- Special interest groups (societies, associations)
- General public

Possible outlets for scientific information

- Papers (peer-reviewed/not reviewed)
- Book chapters (peer-reviewed/not reviewed)
- Books (peer-reviewed/not reviewed)
- Conference papers and abstracts
- Theses (dissertations)
- Posters
- Reports
- Popular journal articles
- Newspaper articles
- Interviews
- Lectures/Talks/Workshops/Discussions

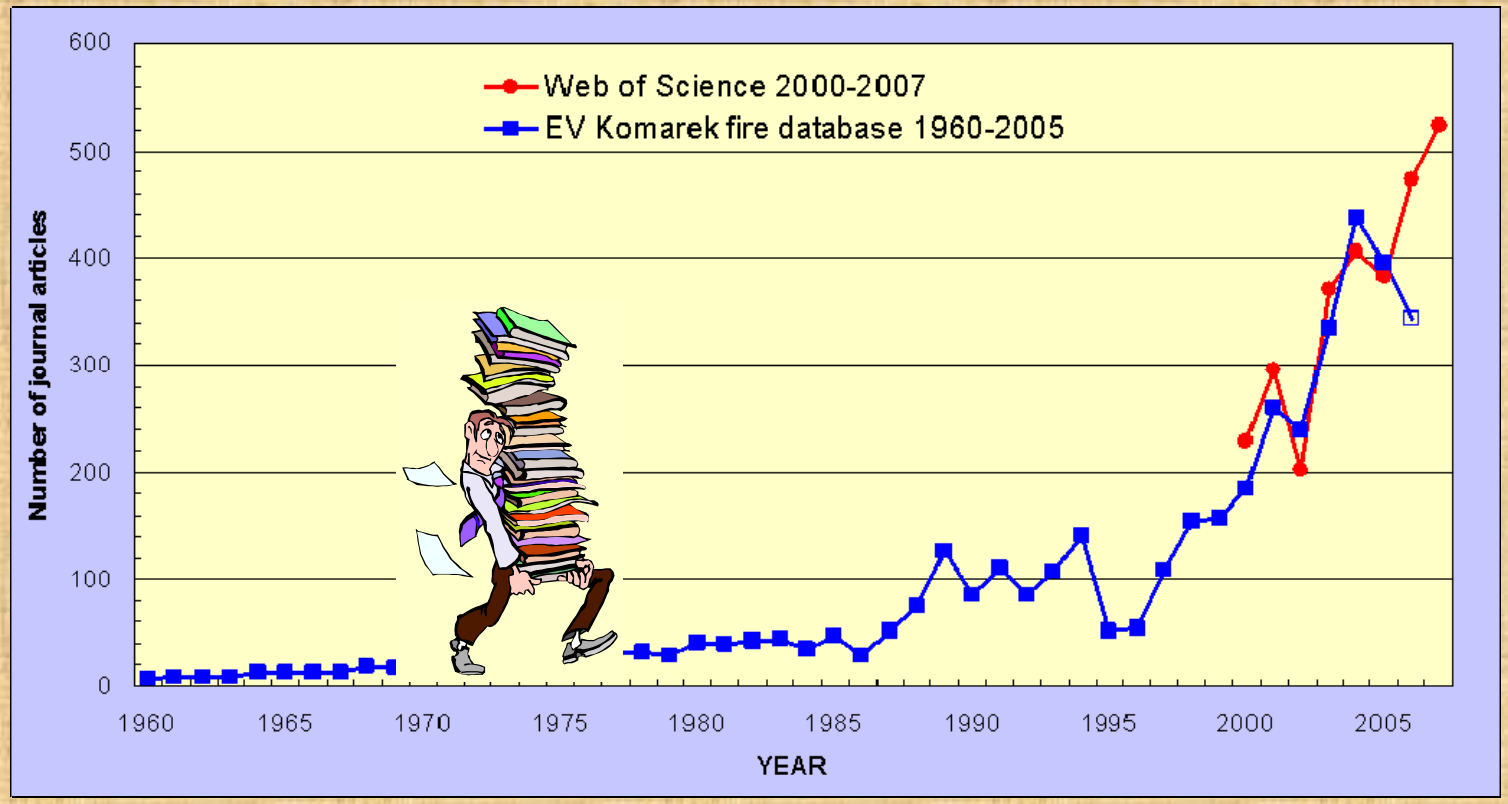
Table 2. Citations by type of publication

Type of publication	Total publi-cations	Cited publica-tions	Total cita-tions	Percent-age cited	Citations per cited publica-tion	Citations per pub-lication
Article (refereed)	344	150	1270	43.6%	8.5	3.7
Book (refereed)	37	3	3	8.1%	1.0	0.1
Book chapter (refereed)	70	8	9	11.4%	1.1	0.1
Other articles	134	19	63	14.2%	3.3	0.5
Other books	307	64	254	20.8%	4.0	0.8
Other book chapters	385	61	197	15.8%	3.2	0.5
Other publications	160	42	106	26.3%	2.5	0.7
Total/average	1437	347	1902	24.1%	5.5	1.3

Refereed journal articles are almost 40x more likely to be cited than books or book chapters, and 7x more than other articles

The Problem

- The number of papers being published annually in any given field is increasing exponentially.
- People have less time to read papers (some don't read any at all ☺)
- How can you get your paper noticed, read, remembered, and used?



The number of papers being published each year is growing exponentially, making it difficult to keep up with advances

Problem:

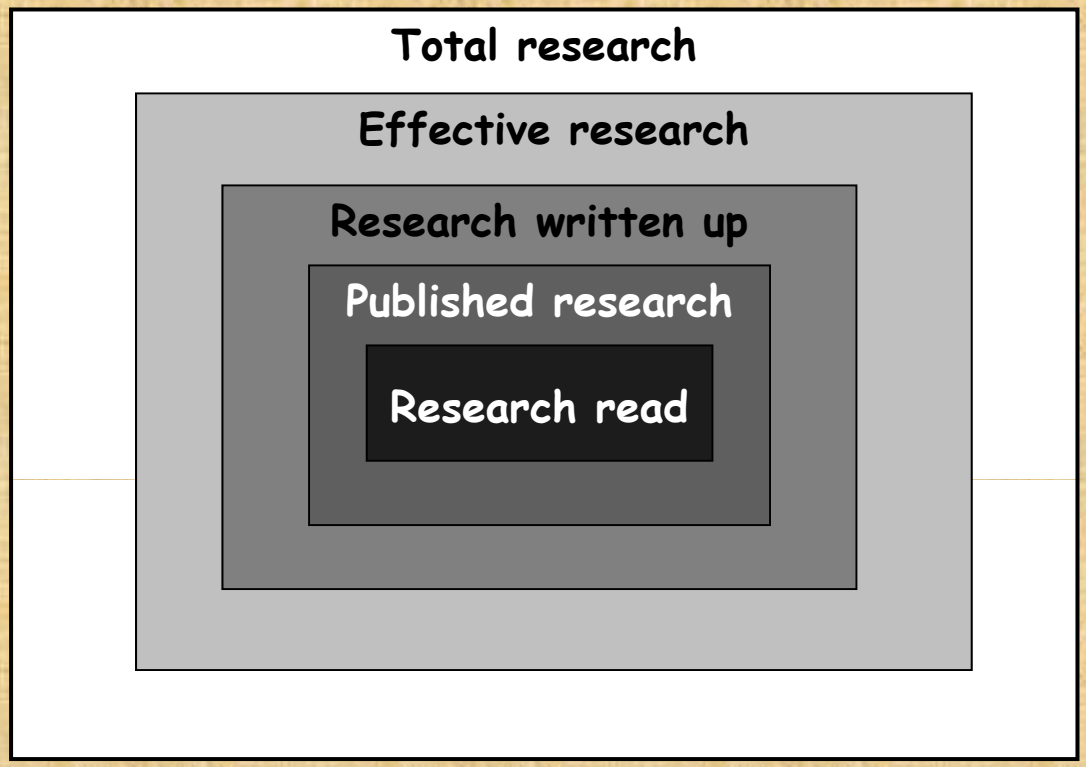
How do you get your paper to stand out from the crowd?

How can you ensure that your paper gets read, cited, and acted upon?

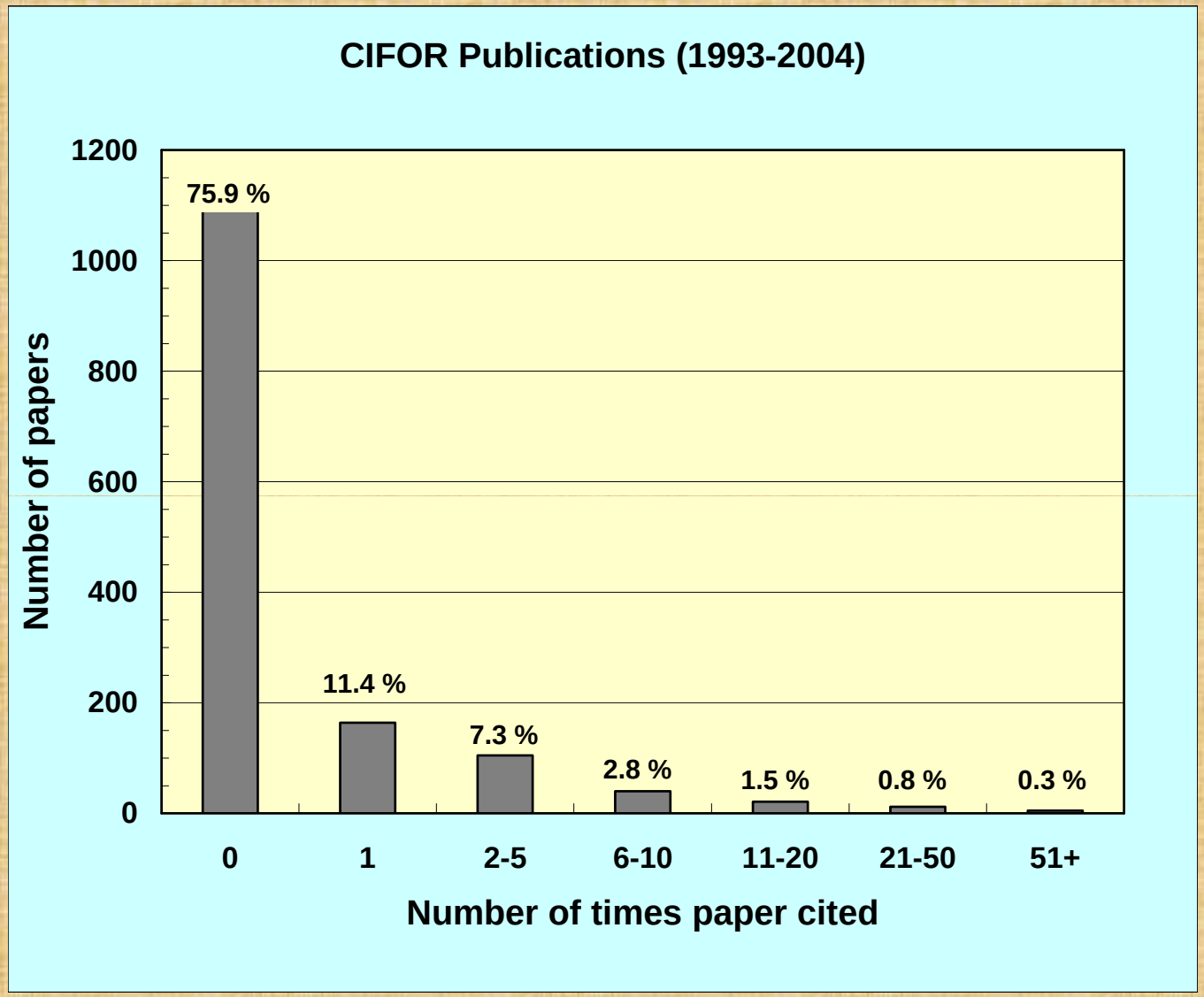


Further problem:

Everyone else is asking the same questions and acting accordingly



The amount of research that eventually gets published and read is only a small proportion of all the research that is done.



Most publications never get cited!

Kinds of papers (based on their fate)

- **Stillborn papers—almost never cited** (no audience; uninteresting; incomprehensible; poor science) ✝*RIP*
- **Unoriginal papers** (nothing new) 😐
- **Promising papers** (new information and ideas) ☺
- **Most-cited papers** (promising and appealing to others—right topic, right place, right time) ☺☺
- **Break-through papers** (change the way we think)



If only a small proportion of all the research that is done actually gets published and read, then:

- this is a waste of resources, time and effort
- it reflects the reality that a lot of research is ineffectual: inadequately planned; not well carried out; and the data poorly analysed.

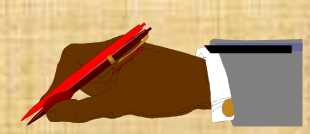
Getting your results published and read therefore means doing good research (a topic for another occasion).

Think about the kind of paper(s) that you would like to publish from the outset (i.e. when planning the research). Don't leave it to the end.

What makes a good paper?



- Attracts attention (good title and abstract)
- Is meaningful (new information and ideas)
- Enhances the reader's understanding, thinking, and action
- Will be filed in the long-term memory
- Is memorable (i.e. the memory is retained)
- Can be recalled—accurately—when needed



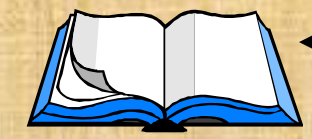
Researcher

Incomplete or inadequate research

Interference

Wrong choice of journal

Message

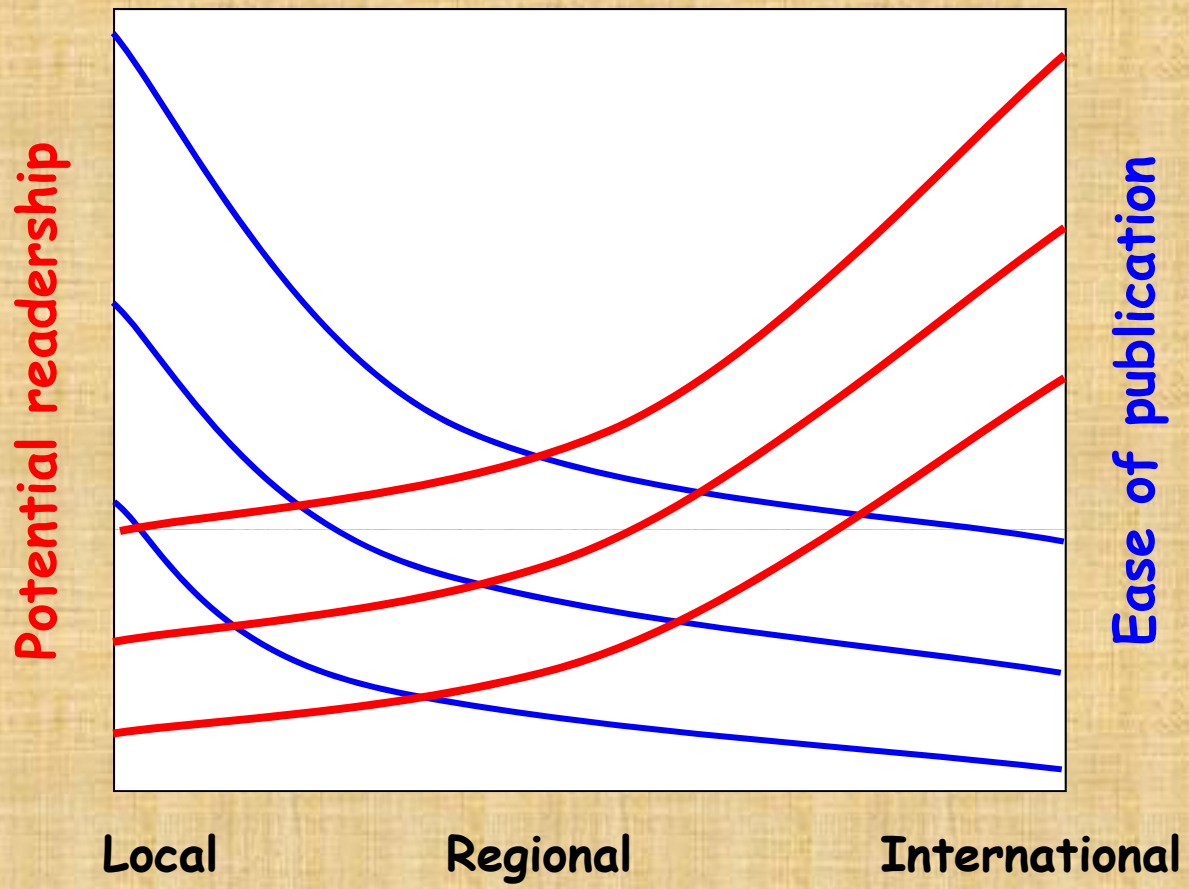


Poor or unclear writing



Readers

Aim to minimize, as much as possible, anything that interferes with you communicating with your audience



Select your journal carefully. Think about audience, coverage, acceptance rates, impact factors etc. Be ambitious but also realistic. Seek guidance.

Monday

Session 2

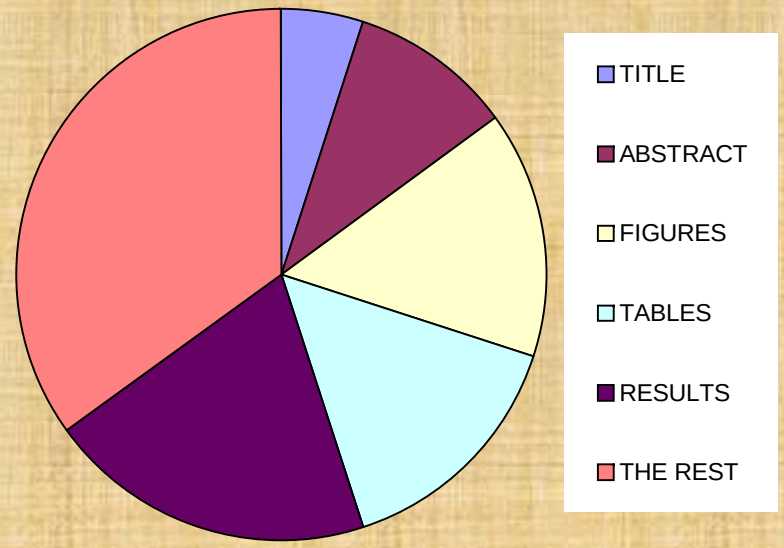
The structure of scientific papers

13h30-15h00

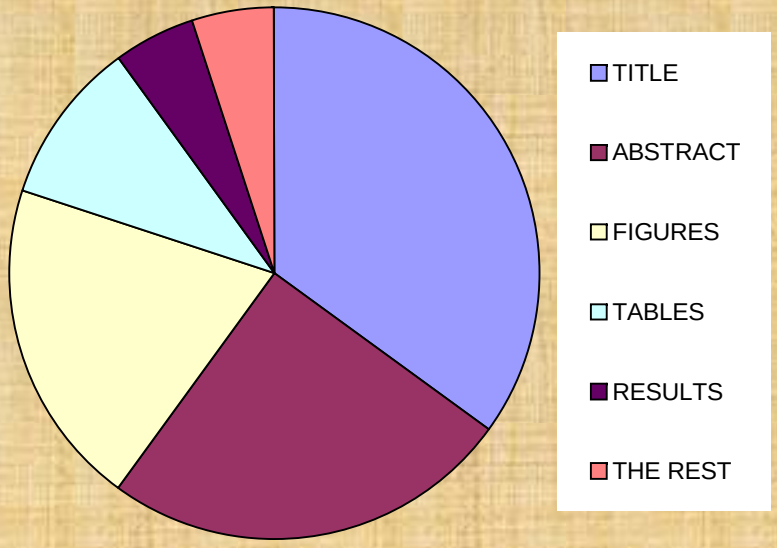
How are scientific papers structured?

- What should a paper comprise?
- What do you think are the most important components of a paper?
- Why do you think they are important?
- In what ways do papers from different disciplines differ?
- Why might this be?

COMMON PERCEPTION OF THE IMPORTANCE OF DIFFERENT COMPONENTS OF A PAPER



ACTUAL IMPORTANCE OF DIFFERENT COMPONENTS OF A PAPER

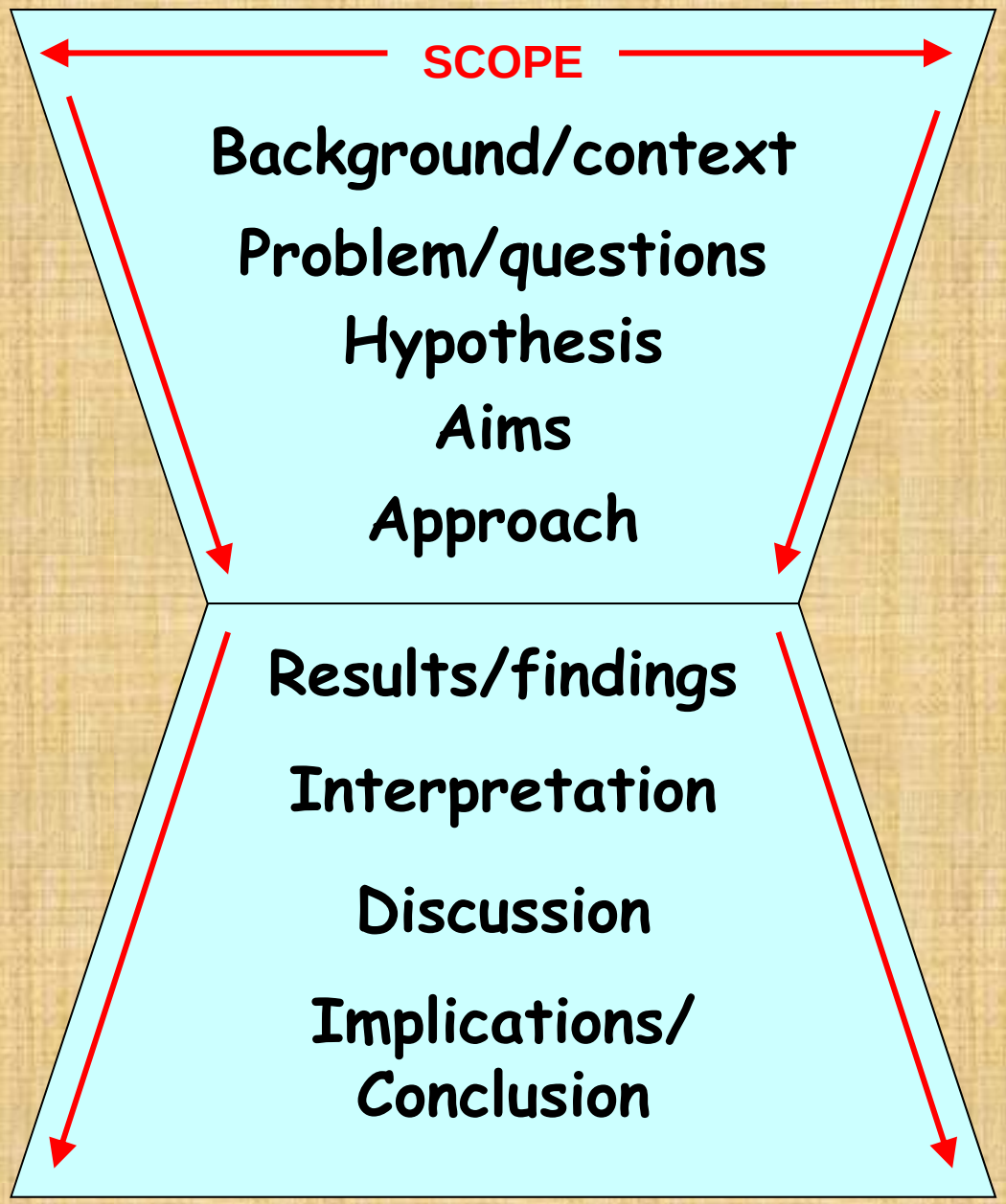


'THE REST' INCLUDES THE DISCUSSION, INTRODUCTION, MATERIALS METHODS, REFERENCES etc.

The three most important components of a paper are the title, the abstract and the figures

Most scientific papers have the same basic layout (IMRAD)

- ***Introduction***: background to the problem that your work addressed; why you did the work - problem, objectives, questions and hypotheses.
- ***(Study area)***: where did you do the work? What are the biophysical and other relevant characteristics of the area?
- ***Materials and methods***: what approaches/equipment/tools did you do use, and how did you use them? What did you do and how did you do it?
- ***Results***: what did you find out? What happened? What did you see, count, and measure? and
- ***Discussion***: what do these results/findings mean?
- NB. In some journals it is acceptable, even preferred, for you to presents results and discussion jointly.
- ***(Conclusions)***: what are the implications of your findings?



When planning the scope of different sections, think of the paper as an hourglass



In choosing a journal consider…

- Scope and aims of journal?
- Types of articles (original; review; length)
- Frequency of publication (and time between submission and publication)
- Any conditions? (copyright; page charges; availability of reprints)
- Do you have any special requirements (e.g. photos; maps)
- Data repository?

Guidelines for Authors

Tip:

Follow them carefully!!!

e.g. *Environment and Development Economics*

Guide for Authors

- Online submission of manuscripts
- General guidelines (layout, length: max 8000 words)
- Tables
- Illustrations
- References
- Formulae
- Footnotes
- Copyright
- [What the author gets in return]
- Assistant Editor's address and email

Criteria for selecting a journal



Think about the criteria you would use when choosing a journal for your paper. In addition to those just mentioned, you might consider the following:

- Scope of the journal
- Intended audience
- Impact rating (probability of being cited)
- Other factors?

Questions you should be able to answer

- What problem are you addressing? (i.e. what are your research questions?)
- What key research concepts and approaches underlie your research?
- Who is the intended audience for the paper?
- What will most interest that audience?
- What is the main message of the paper?
- Do you have sufficient quantifiable information to support that message?

Monday

Session 3

Getting started

15h30-17h00

How do I start?

- What am I going to write about? [Try writing either a summary statement or an informative title.]
- What am I going to say? [Write a synopsis or abstract.]
- For whom am I writing this paper? [Select an audience.]
- Will my results be interesting to a broad audience or a narrow, specialist, one? [Select a journal.]
- What will be the building blocks of the paper? [observations, measurements or other data]
- How best can these elements be presented? [Think of structure and linkages.]

Write a 'summary statement'



Look back at what you consider to be the main findings of your research and try to write a statement that summarizes the finding.

Write no more than 1-2 sentences.

How do I start?

- What am I going to write about? [Try writing either a summary statement or an informative title.]
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Planning the paper (1)



- Review and, if necessary, revise your 'summary statement'
- Expand on the statement to produce a synopsis or draft abstract of the paper

Synopsis (Abstract)

- ***What did I do?***
- ***What did I find?***
- ***What does it mean?***
- ***What do I conclude?*** **(=thesis statement)**

The points don't always have to be in this order

Example

Bennear L.S. and Stavins, R.N. (2007). Second-best theory and the use of multiple policy instruments. *Environmental Resource Economics* **37**: 111-129

Abstract In many cases policy makers employ multiple instruments to address a single environmental problem, but much of the economics literature on instrument choice focuses on comparing properties of single policy instruments. We argue that under a fairly broad set of circumstances the use of multiple policy instruments can be justified as optimal in a second-best world. We examine two broad categories of second-best policy making: cases with multiple market failures only some of which can be corrected at any one time; and cases with exogenous (often political) constraints that cannot be removed. The fact that the use of multiple policy instruments can be justified economically in these two cases does not imply, however, that all multiple instruments employed in actual practice are economically justified.

STATING THE PROBLEM

STATING THE THESIS

STATING THE SOURCE OF EVIDENCE

STATING A CONDITIONALITY

Elements of a good story (Kendall Haven, 2006)

- Who are the main characters in the story?
- What character traits or features make them interesting or relevant?
- What are the characters trying to achieve? (goal)
- Why is that goal important? (motive)
- What obstacles/problems/conflicts block the character from achieving the goal?
- How do these obstacles function, thereby creating risk and danger? (anticipation)
- What do the characters do to overcome these obstacles? (What are the characters' struggles?)
- What sensory detail (imagery, illusion) will make this story vivid and real?

How do I start?

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Consider what information you will need to provide to support your findings and conclusions. List these and indicate if the information would best be presented in a table, a figure, or as text.

For example:

Location of study site and communities (Figure)

List of stakeholders and interests (Table)

Research approach (field work, interviews, workshops, local knowledge – Text)

Attitudinal changes (Table of 'Before' and 'After')

etc.

Guidelines on Presenting Results

- Presenting results is central to any scientific paper aiming to report original work
- Results can be presented in various ways
- How a particular result is best presented depends on the nature of the information that you wish to communicate
- Purely descriptive results are best presented in the text as narrative or, if warranted, as photographs or drawings. Draw attention in the text to the main points of an illustration
- Quantitative information is best given in either tabular or graphical form, depending on the nature of the data

TEXT

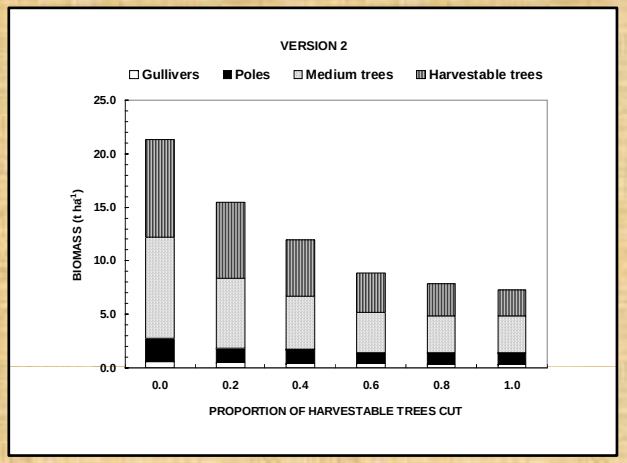
Results

The proportion of harvestable trees removed in a 40-year cutting cycle influenced the distribution of biomass among the size classes more than it affected total woody biomass In Version 1 of the model, overall woody biomass was reduced by >50% when 80% or more of the harvestable trees were removed in a cutting cycle (Figure 1). Similar changes were reflected in woody basal area (Table 1).

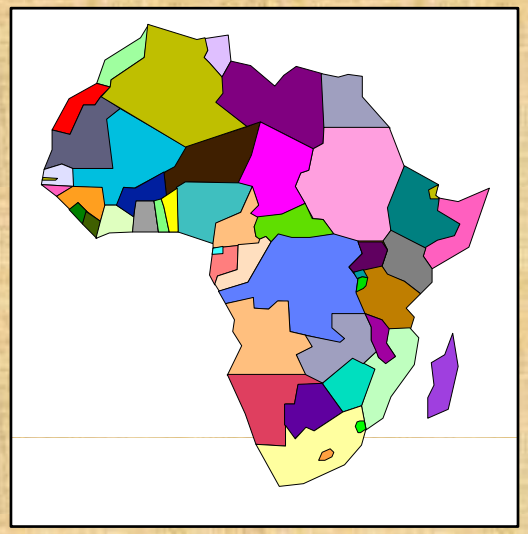
TABLES

Carbon pool (Mg C ha^{-1})	Dry miombo	Wet miombo
Aboveground carbon	25 (±4.3, 6)	41 (±6.0, 4)
Belowground carbon[1]	13 (-)	22 (-)
Soil carbon	61 (± 28, 8)	129 (± 49, 22)
Total	99	192

FIGURES



ILLUSTRATIONS



COMPONENTS OF A TABLE

Table 2. Mean annual increment (MAI) at 50 years rotation on poor, average, and good sites

[CAPTION]

[BOX HEADING FOR STUB] Country	Site Classes [BOX HEADINGS FOR FIELDS] Poor	Average	Good
	MAI ($m^3 ha^{-1} yr^{-1}$)		
India [a] [STUB]	2.0	5.8	10.0
Myanmar [a]	4.3	8.7	12.0
Indonesia [a]	9.6	13.8	17.6
Thailand [b]	2.8	3.8	4.7

[FIELDS]

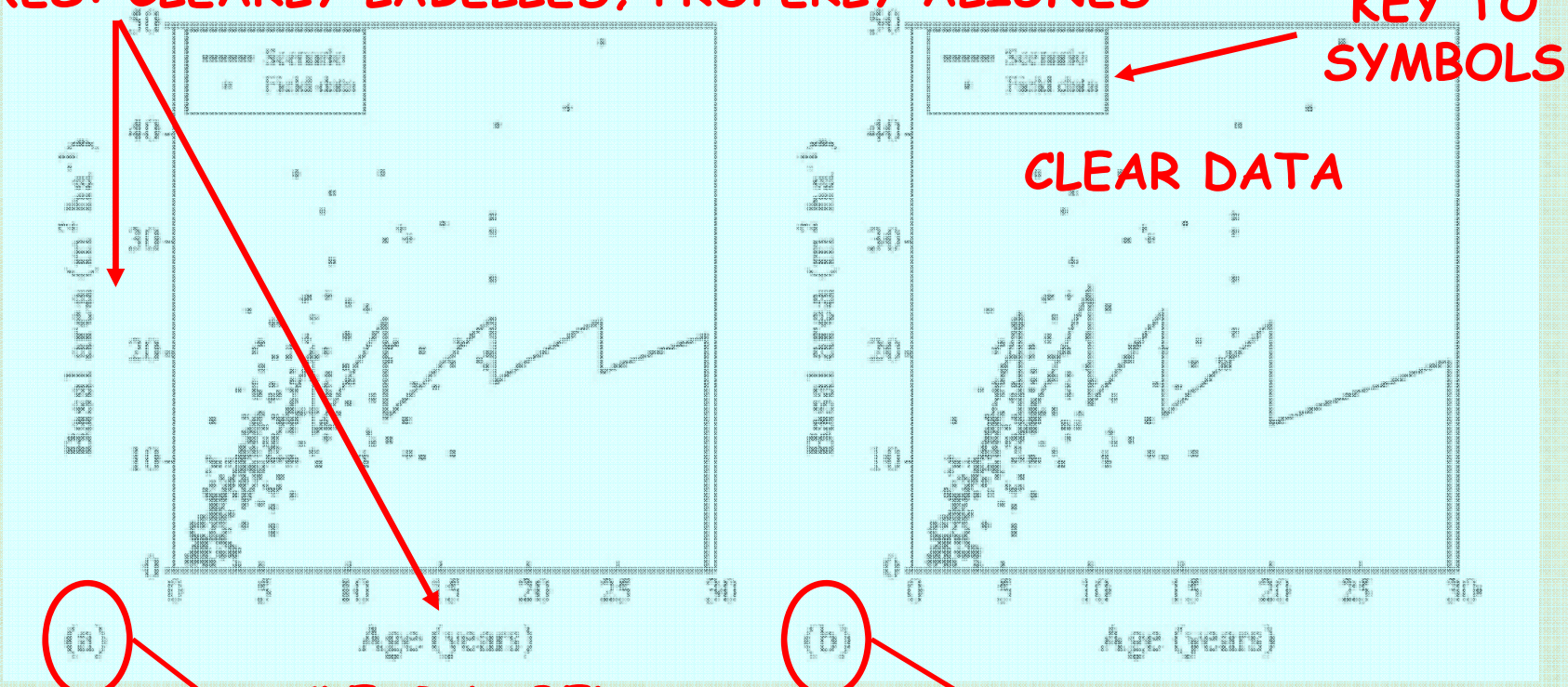
[a] Ball *et al.* (1999)
[b] Chanpaisaeng (1977)

[FOOTNOTES]

FIGURES

AXES: CLEARLY LABELLED; PROPERLY ALIGNED

KEY TO SYMBOLS



CLEAR DATA

CLEAR LABELS

Fig. 5. Basal area management scenarios for *T. grandis* plantations in Costa Rica in a high-quality site, with rotation of 30 years, and with the objective of (a) high individual tree growth and (b) high stand growth. Dots represent the field observations.

CAPTION

From Pérez and Kanninen (2005), Forest Ecology and Management 210: 425–441

- Use tables where the values of the numbers are important, both for the conclusions being drawn, and where the data may be used later by other researchers.
- Use graphs where you want to draw attention to trends or patterns, and where the actual values of the data points are less crucial than the patterns.
- Numerical data presented in tables usually do not need to be repeated in the text, though you should summarise the main points that you wish the readers to note.
- Likewise, summarise in the text the main trends shown in your graphs. Do not assume that your readers will interpret the graphs in the same way that you do.
- In all cases, be sure to link the data given in the tables, graphs and illustrations to the text, so that they key points are brought to the reader's attention.

How do I start?

- What am I going to write about? [Try writing either a summary statement or an informative title.]
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Planning the paper (2)

Develop a structure and outline

Develop a structure

- What is the plan or layout?
- Based on the layout of papers in the journal for which you are writing, plan the paper - create a structure

Planning a paper: the outline

1. Heading 1
   - 1.1 Subheading 1
   - 1.2 Subheading 2
2. Heading 2
   - 2.1 Subheading 1
     - 2.1.1 Sub-subheading
     - 2.1.2 Sub-subheading
   - 2.2 Subheading 2
3. Heading 3
4. Heading 4 etc…etc…

e.g.

Niskanen, A. (1998). Financial and economic profitability of reforestation in Thailand. *Forest Ecology and Management* **104**: 57-68

1. Introduction
2. Data and methods
2.1 Reforestation options
2.2 Growth and yield analysis
2.3 Cost and price data
2.4 Financial profitability analysis
2.5 Economic profitability analysis
2.5.1 Conventional cost-benefit analysis
2.5.2 Standard conversion factors
2.5.3 Specific conversion factors
2.5.4 Opportunity costs of land and non-educated labour
3. Results
3.1 Financial and economic profitability of reafforestation
3.2 Sensitivity analysis
4. Discussion

e.g.

Siregar, *et al.* (2007) Economic analysis of sengon (*Paraserianthes falcataria*) community forest plantation, a fast-growing species in East Java. Forest Policy and Economics 9: 822-829

- **Abstract**
- **Introduction**
- **Methodology**
- **Results and discussions**
  - **Community forestry practices in Kediri, East Java**
  - **NPV and benefit-cost analysis of pure and mixed plantations**
  - **Factors influencing community decision**
- **Conclusion**
- **Acknowlegement**
- **References**

Thinking and writing tasks for the coming days



Write down a framework for your paper; consider just the main headings and subheadings. Think carefully about these.

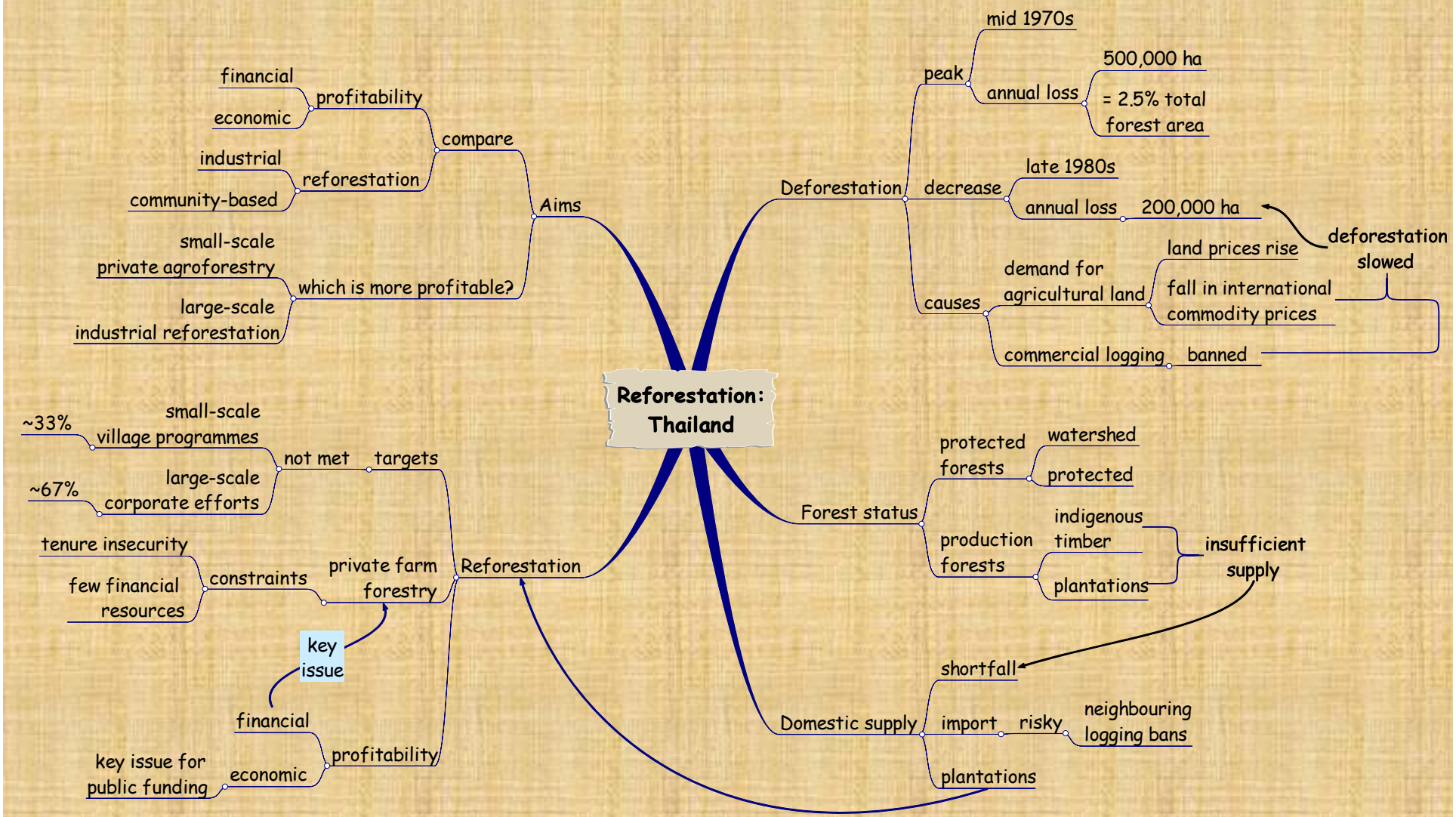
When you have a suitable framework, begin expanding the outline by listing the main points that you intend making under each of these headings and subheadings.

Think about the SCIENCE at this stage, not the language or style (that comes later)

Review the expanded plan

- Have I got all that is significant into the outline?
- Does a coherent story emerge?
- Try to write the points as definitive statements and, where appropriate, indicate how you intend to support or justify them.

If you have many points to make, and are finding it difficult to organise them, try 'mind mapping' them.



Focus on the science, not the language AT THIS STAGE

- Begin with the relatively easy sections: *Materials*, *Methods* and *Study Areas* (purely descriptive)
- Then focus on the *Results* (also largely descriptive).
- Structure the *Discussion* logically: what you found; what it means; how it compares; what the implications are (move from the specific to the general)
- Leave the *Introduction* to the last !!

Friday

Session 4

Writing effectively

13h30-15h00

Writing effectively

- Write simple, straight-forward declarative sentences; don't over-elaborate (KISS)
- Make the paragraph the unit of composition: one idea, one paragraph.
- Build the paragraphs around the bullet points/statements of your outline; explain the point and provide supporting evidence (or counter-examples), as necessary.

CONSTRUCTING PARAGRAPHS

- One idea (one point): one paragraph
- The point is in the topic sentence
- Three types of paragraph, depending on where the topic sentence is placed
  - Regular or direct
  - Pivoted
  - Suspended

Two Approaches to Paragraph Construction

- Deductive Approach
  - Regular or direct paragraph
- Inductive Approach
  - Pivoted paragraph
  - Suspended paragraph

Deductive Approach

- Argument followed by reasoning (the converse of how the paper is written)
- More persuasive writing
- Tacitly acknowledges the reader's time constraints (easy to find the essence of each paragraph)

REGULAR OR DIRECT PARAGRAPH

- A direct paragraph comprises
  - A topic sentence (the main point)
  - One or more supportive sentences
  - Usually one limiting sentence (qualifier or a constraint on the main point)
  - Transition sentence, linking this point to the next one

The most usual form of paragraph

DIRECT PARAGRAPH

Partnerships generally aim to generate two main kinds of benefits. One is the economic empowerment of local communities through new income-generating opportunities and improved market access. Another is the political empowerment of previously marginalised groups in terms of increased participation in decision-making and access to land and natural resources. Political empowerment can be an important condition for economic empowerment, given that livelihoods depend on secure rights to land and resources.

Ros-Tonen, M.A.F., Andel, T. van, Morsello, C., Otsuki, K., Rosendo, S. and Scholz, I. (2008). 'Forest-related partnerships in Brazilian Amazonia: there is more to sustainable forest management than reduced impact logging'. *Forest Ecology and Management* 256: 1482–1497.

cf. Inductive Approach

- Evidence followed by conclusion (similar to paper as a whole)
- Less persuasive writing
- Forces the reader to wade through a paragraph to find the point
- Risks not being read at all
- BUT, necessary in some parts of the paper

PIVOTED PARAGRAPH

- A pivoted paragraph comprises
  - A limiting sentence
  - One or more supporting sentences
  - A pivot sentence ("Nevertheless…", "Although…", "~~However~~,…"
  - The topic sentence (the main point)

<u>Usually used when challenging an established idea</u>

PIVOTED PARAGRAPH

Getting the timber produced by community logging operations certified under FSC has been unsuccessful so far due to a lack of funds and difficulties in meeting the strict certification criteria. Since the FSC introduced the Small and Low-Intensity Management (SLIMF) initiative in 2002, group and community certification has been made more affordable. As a result, at least five Resident and Producers Associations in Amazonian extractive reserves were on the list of FSC-certified forest operations in June 2007 (http://ww2.imaflora.org). Despite these more favourable conditions, no products from extractive reserves in Rondônia have yet been certified.

LIMITING SENTENCE

SUPPORTIVE SENTENCE

PIVOTING SENTENCE

TOPIC SENTENCE

Ros-Tonen, M.A.F., Andel, T. van, Morsello, C., Otsuki, K., Rosendo, S. and Scholz, I. (2008). 'Forest-related partnerships in Brazilian Amazonia: there is more to sustainable forest management than reduced impact logging'. *Forest Ecology and Management* 256: 1482–1497.

SUSPENDED PARAGRAPH

- A suspended paragraph comprises
  - One or more supportive sentences
  - One or more limiting sentences
  - The topic sentence (main point, conclusion)

<u>Used when putting forward a novel idea or argument</u>

SUSPENDED PARAGRAPH

In any partnership, attention should be paid to potential drawbacks from the start, like unequal distribution of benefits according to gender or age, interference with subsistence activities that may threaten food security, trade-offs in terms of time available for socialisation which negatively impact on people's resilience to shocks, and negative consequences of power imbalances. Several drawbacks are inherent in trading with indigenous communities, such as cultural and language barriers, their lack of knowledge of the markets' logical frame of mind, and notions of equality which conflict with the hierarchies common in an enterprise (Bray and Merino, 2003). The cases illustrate that overcoming such barriers, and building trust and co-management institutions need time—often more than the donor's average project cycle.

SUPPORTIVE SENTENCE

LIMITING SENTENCES

TOPIC SENTENCE

Partnerships therefore need long-term commitment and realistic timeframes.

Ros-Tonen, M.A.F., Andel, T. van, Morsello, C., Otsuki, K., Rosendo, S. and Scholz, I. (2008). 'Forest-related partnerships in Brazilian Amazonia: there is more to sustainable forest management than reduced impact logging'. *Forest Ecology and Management* 256: 1482–1497.

Improving the paper:

A focus on style

So, I have a first draft; now what?

- Revise it, ensuring that the information and ideas are presented logically.
- Check the scientific content.
- Show it to colleagues and get their feedback on the scientific content.
- Prepare a second draft, paying attention to layout, style, clarity of expression etc.
- Put it aside for awhile, to allow you to come back to it with a fresh mind.
- ...etc., etc., etc...

STYLE

(The Concise Oxford Dictionary of Current English, 1982)

- 2. Manner of writing, speaking, or doing…
- 3. Collective characteristics of the writing or diction or way of presenting things…proper to a person or school or period or subject…
- 9. Use specified designation of…

KEY ELEMENTS OF STYLE IN SCIENTIFIC WRITING

- ABC - Accuracy, Brevity and Clarity
- 4Cs
  - Correct or exact description, analysis and conclusion
  - Concise
  - Clear (i.e. comprehensible)
  - Conversational; talk to the reader

USE SHORTER, SIMPLER WORDS, EXPRESSIONS AND SENTENCES

SHORTER, SIMPLER WORDS

• accordingly	so
• commence	start, begin
• deficiency	lack
• facilitate	help
• modification	change
• utilise	use

FEWER WORDS AND SHORTER EXPRESSIONS

• at this moment (point) in time	now
• due to the fact that	because
• for the reason that	because
• in order to	to
• in spite of the fact that	although
• in the near future	soon
• it would therefore appear that	apparently
• made a census	censused
• on two separate occasions	twice
• rectangular in shape	rectangular
• bright green in colour	bright green
• 30 hectares in area	30 ha

AVOID SUPERFLUOUS PHRASES

- Phrases such as in fact… in actual fact… it should be noted that… it has long been known that… it is interesting that… can all be omitted without any loss of meaning

- Sentences that begin "Gunarso (2005) has shown that…" OR "Gunarso (2005) states that…" can be improved by simply stating what Gunarso showed or said and then referring to the source at the end of the statement (Gunarso, 1999)

~~I SUGGEST THAT YOU~~ AVOID SLOW BEGINNINGS

GET TO THE POINT! AVOID SLOW BEGINNINGS

- It would therefore appear that…
- In this study we found that…
- It was already known that…
- In view of the fact that…
- Our questionnaire survey showed that…

WRITE SHORT SENTENCES

- The average length of sentences should be no more than 15 to 20 words long
- How do you know when your sentence is too long? When you start stringing different subjects together with "and"…"and"…"and" (or other conjunctions)

USE THE ACTIVE RATHER THAN PASSIVE VOICE

- The committee decided… (ACTIVE)
- The decision was made by the committee… (PASSIVE)

- The women harvest the fruits… (ACTIVE)
- The fruits are harvested by the women… (PASSIVE)

- We held monthly meetings… (ACTIVE)
- A monthly meeting was held… (PASSIVE)

USING "I" AND "WE"

- It was discovered that…
  - I discovered…
- A survey was carried out…
  - I carried out a survey…
- A survey was carried out…
  - We surveyed…

BUT BEWARE OF "I… I… I… " OR "We… We… We…"

AVOID OVERWORKED AND STALE PHRASES

- At this point in time… (now, currently, at present)
- A ballpark estimate… (approximately)
- In actual fact… OMIT ENTIRELY

AVOID EXCESSIVE USE OF ADJECTIVES

- The difference between A and B was very big
- This result is greatly affected by…
- Reflecting on monitoring results is extremely crucial…
- This process is quite challenging…

AVOID USING COMPOUND NOUNS
(NOUNS USED AS MODIFIERS OF OTHER NOUNS)

Multi-stakeholder resource management situations

Home range size stability was measured by plotting the cumulative area occupied curve

Non-cash forest related income…

= Non-cash income from forests

Friday

Session 5

Preparing the final draft

15h30-17h00

Preparing the final draft

- Confirm your facts and review your arguments
- Check citations and references
- Get permission to use proprietary work (other than that falling within the framework of 'fair use')
- Double-check the Guidelines to Authors, and follow them

Check and refine, where necessary

- **Style and use of language:** use active not passive constructions; prefer short words to their longer alternatives; revise compound nouns; remove slow start-ups ("blah blah that, blah blah…)
- **Layout:** does the paper conform to the journal's guidelines?
- **Are all the citations in the References (and are all the references cited)?**
- **Can the arguments (logic) be improved?**

TO WRITE AND RE-WRITE IS NORMAL

Bloom's taxonomy

(modified from http://writing2.richmond.edu/writing/wweb/bloom.html)

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Levels of understanding



Category (simplest first)	Expressed by writer as…	To shift the thinking, ask…
Knowledge	Lists; long quotations; poor paraphrasing; indiscriminate ideas	How best can I explain the topic to someone else in my own words?
Comprehension	Own words used more; relative importance of ideas and sources unclear; interesting but irrelevant information given	How relevant is the information to the topic? In what ways does this information support my thesis? Give examples.
Application	Relevant ideas/evidence; still too much reliance on other people's analysis; received information equated with original research	What common ideas link these sources? Outline the information by ideas, not by source.

Category	Expressed by writer as…	To shift the thinking, ask…
Analysis	Less reliant on other's ideas. Themes and ideas from others identified, but not integrated	What else might be important about the topic? What else would I like to know? How convincing is the evidence given by other sources?
Synthesis	Text organized by themes and ideas rather than by source. Problems of reconciling conflicting information remain.	Which information is most convincing? Why? How can I evaluate different sides of the argument? Can I use the information to say something new?
Evaluation	Shows understanding of relative value of different sources and ideas (and gradations between them)	

CITING AND LISTING REFERENCES

- Rule 1. Follow the Guide to Authors of the journal for which you are writing your paper.
- Rule 2. Follow the Guide to Authors of the journal for which you are writing your paper. [*No, it is not a mistake!*]

  How to cite references in the text and in the Reference section is journal specific, though there are some general features

Citations in text

"…[statement]…(Hartanto 1999)."

OR

"…[statement]…(Hartanto, 1999)."

OR

"…[statement]…[5]"

(then in Reference section…

5. Hartanto, H. 1999. [Reference])

Citing multi-authored papers in text

Two authors

"...(Levang and Sitorus, 2006)."

"...(Levang & Sitorus, 2006)."

Three or more authors

First citation

"...(Sharizaila, Mokhtar, Pereira, and Aziz, 2003)."

Subsequent citations

"...(Sharizaila et al., 2003)."

More than seven authors

First citation

"…(Sheil, Puri, Basuki, and 13 others, 2003)"

Subsequent citations

"…(Sheil et al., 2003)"

Papers published in scientific journals

Usually cited in the following manner:

Author(s), initial(s). year of publication. Title of paper. *Journal in which paper was published*, **Volume number**, page number(s).

Abdullah, A.R., 1995. Environmental pollution in Malaysia: trends and prospects. *Trends in Analytical Chemistry*, **14**: 191–198.

OR

Abdullah, A.R. (1995). Environmental pollution in Malaysia: trends and prospects. *Trends in Analytical Chemistry*, **14**, 191–198.

Book

Kuhn, C., Katz, E., and Levang, P. (2001) *At Home in the Forest: The Punan People of the Malinau River*. CIFOR, Bogor, Indonesia

Kuhn, C., E. Katz, and P. Levang. 2001. *At Home in the Forest: The Punan People of the Malinau River*. Bogor, Indonesia: CIFOR.

Council of Biological Editors. 1983. *CBE Style Manual* (5th edition). Bethseda, Maryland: Council of Biological Editors, Inc.

Chapter in book

Walker, B.H. 1982. Is succession a viable concept in African savanna ecosystems? *In*: D.C. West, H.H. Shugart and D.B. Botkin (eds). *Forest Succession: Concepts and Application*, pp. 431-447. Springer-Verlag, New York.

OR, OCCASIONALLY,

Cribb, R. (1998). Environmental policy and politics in Indonesia. *In*: Desai, U. (ed.), *Ecological Policy and Politics in Developing Countries: Economic Growth, Democracy, and Environment*, SUNY Press, New York, 65–85.

Summary points

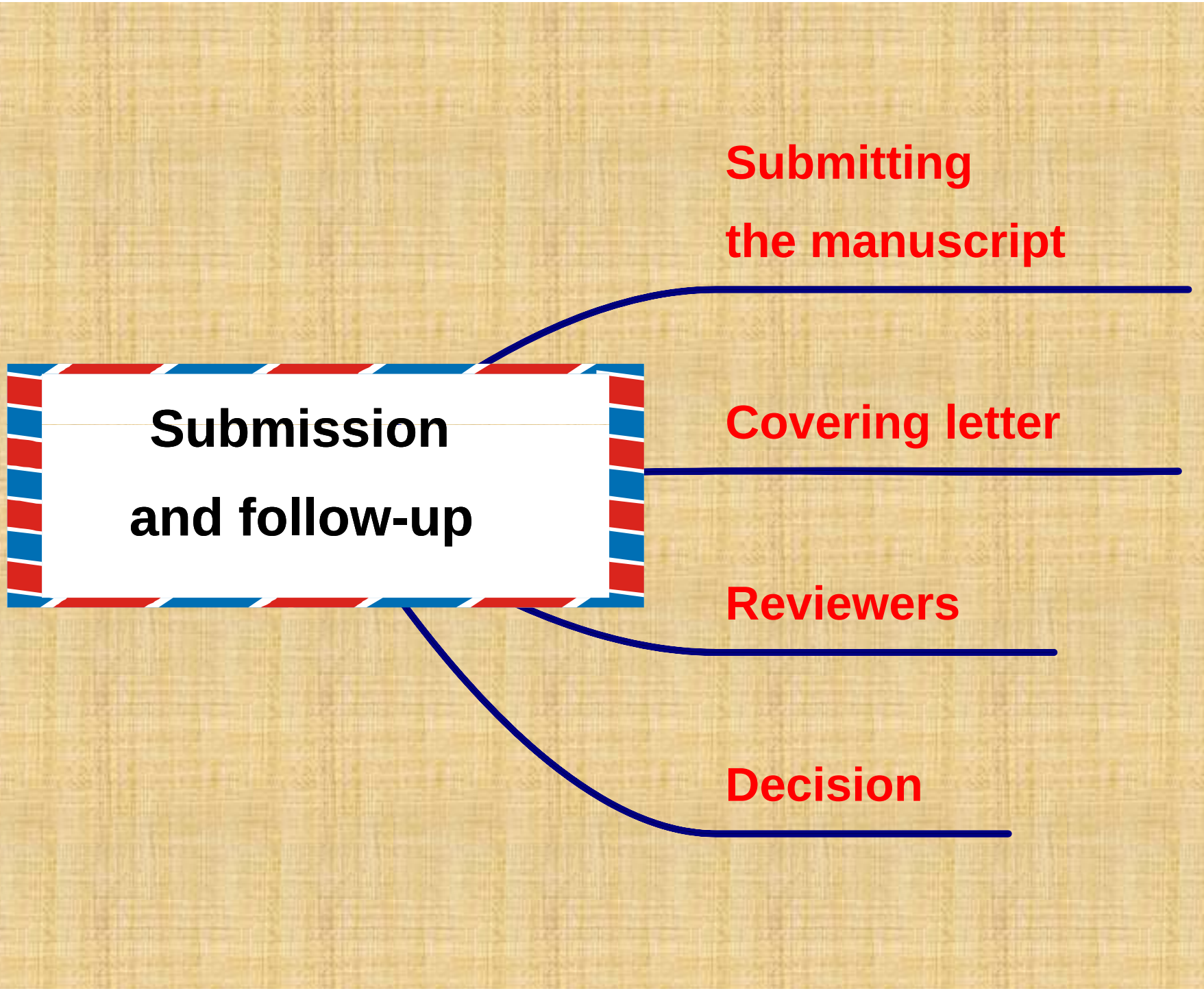
- Much variation in how references are cited.
- **Check the Guide to Authors given by the journal.**
- If these are not explicit, look at a recent paper from the journal, and follow the styles used there.
- Pay particular attention:
  - to how initials to names are given;
  - to the use of brackets and other punctuation marks;
  - to the order of the publisher and place of publication of a book or report; and
  - to the formatting (*italics* and **bold**) of such things as the title of the publication and the journal volume number.

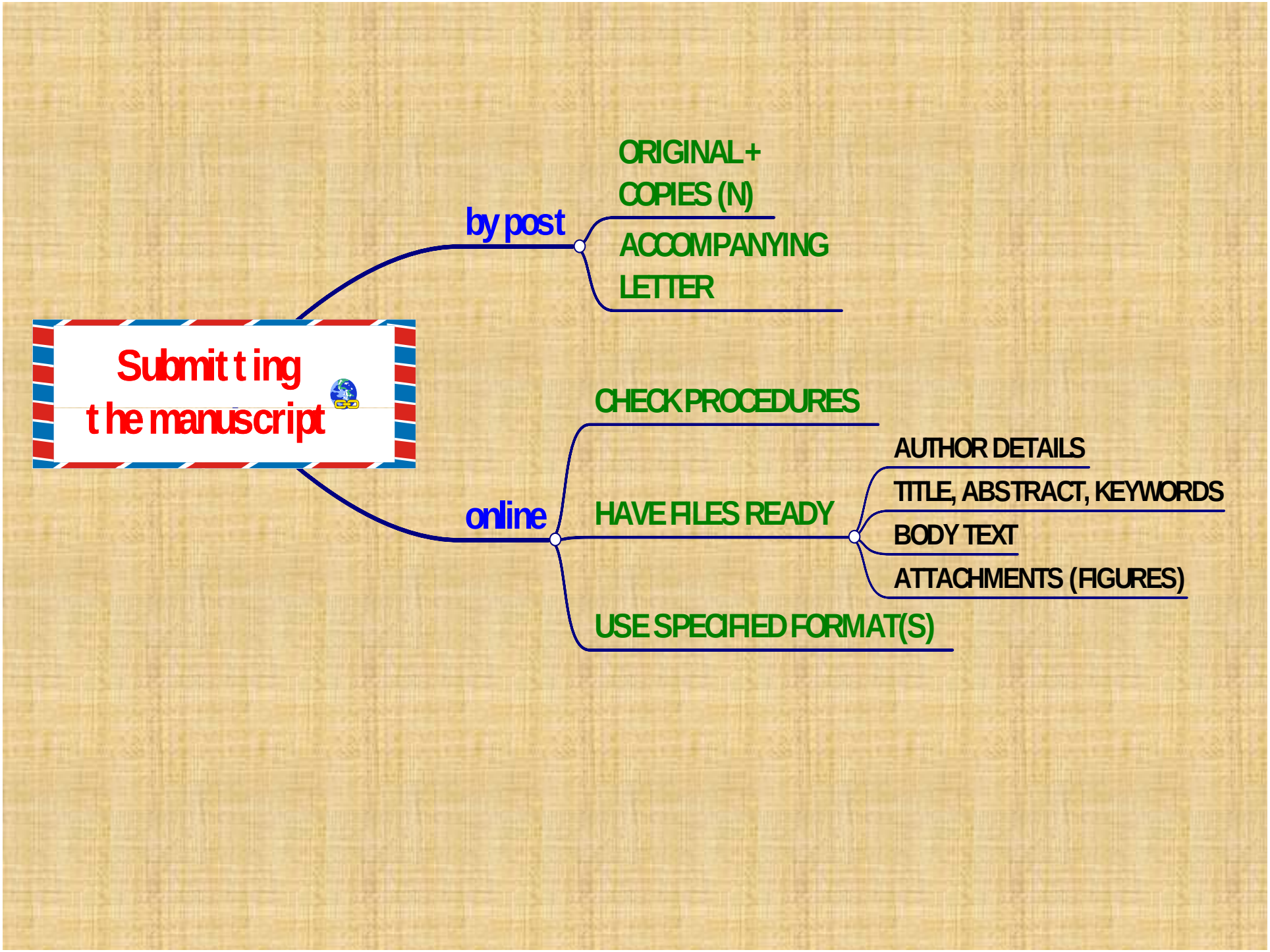
Saturday

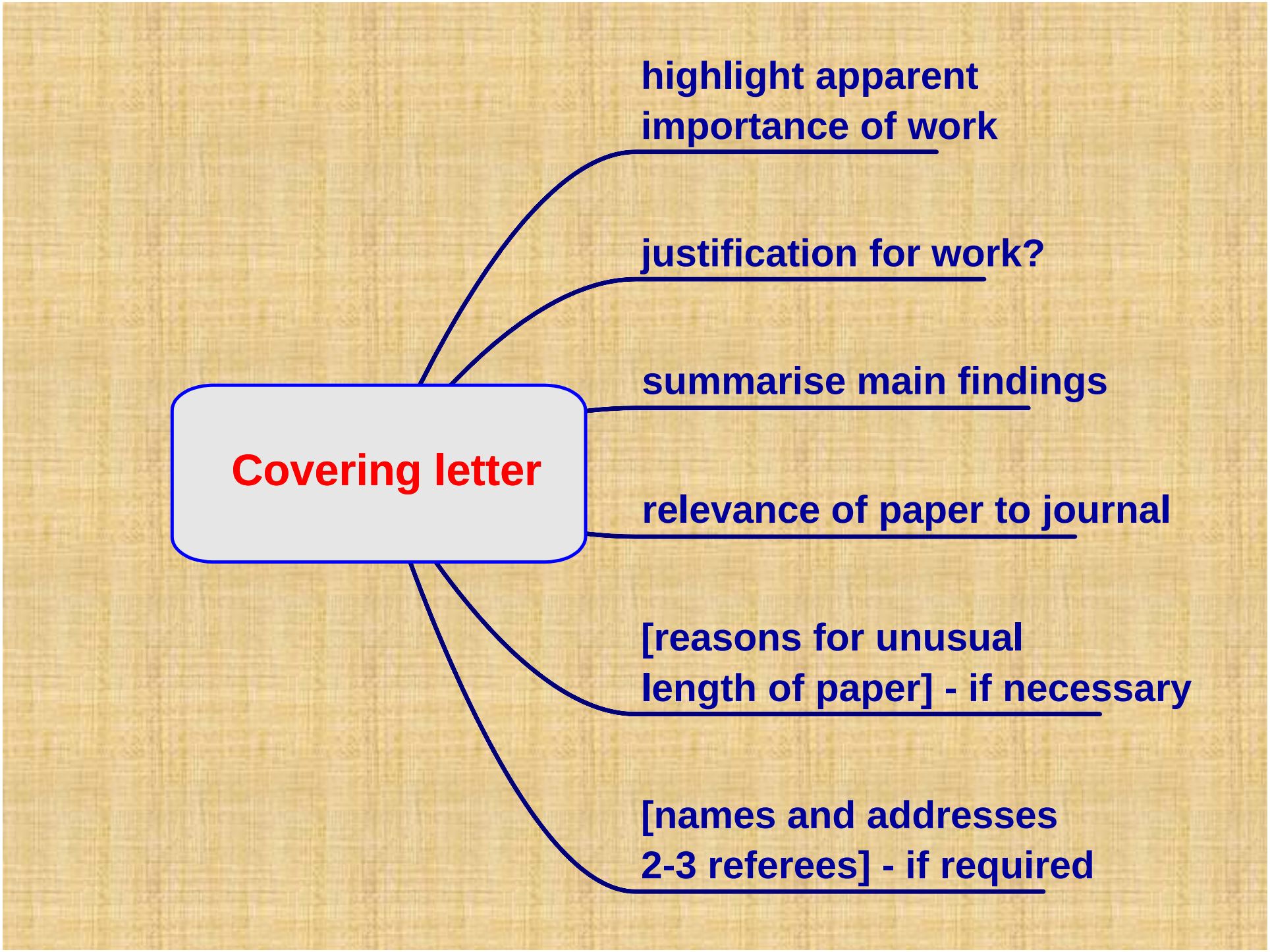
Session 6

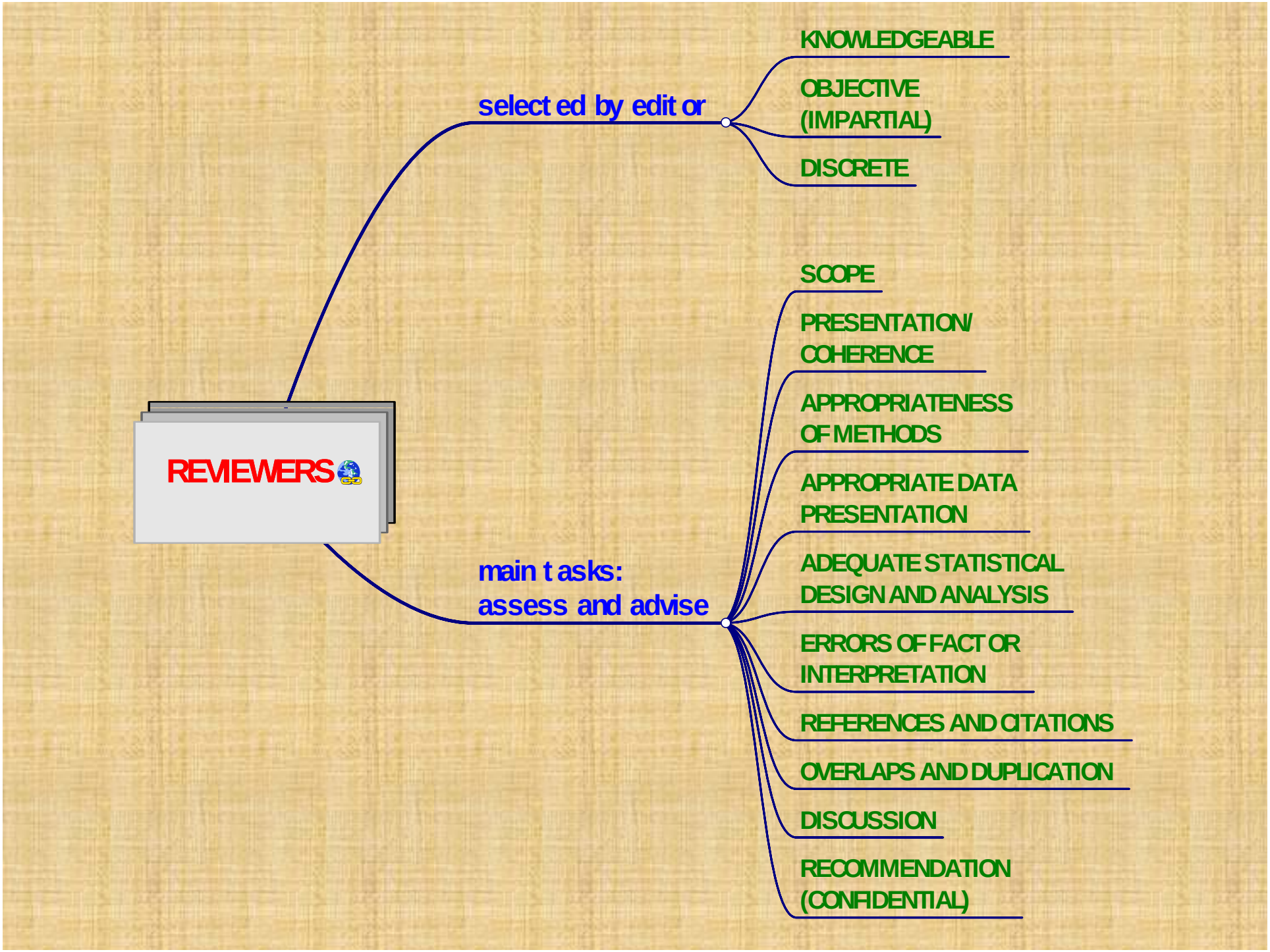
Submitting the paper and follow-on

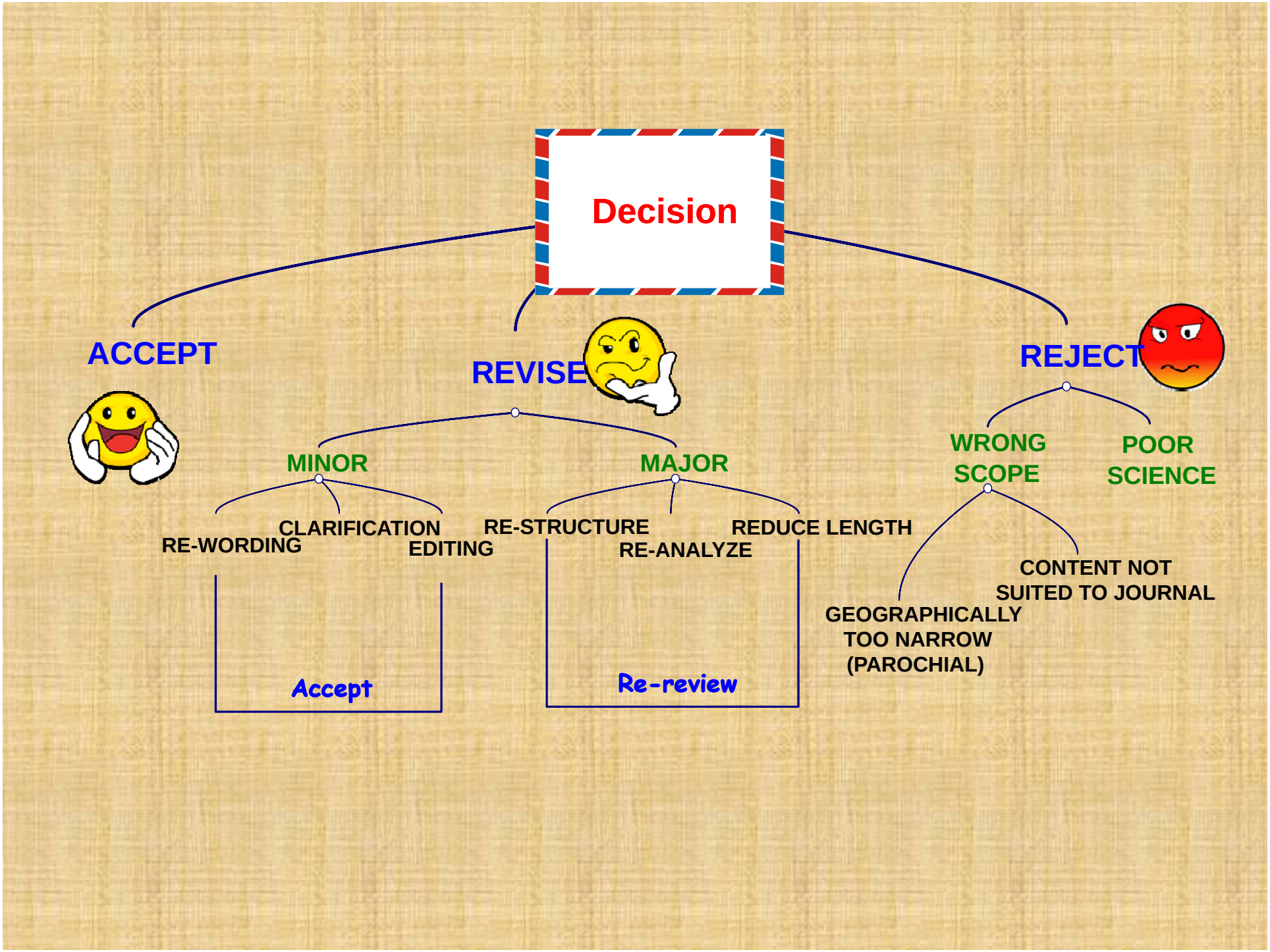
09h00-10h30


Submitting
the manuscript
Submission
and follow-up
Covering letter
Reviewers
Decision


Submitting the manuscript
by post
ORIGINAL + COPIES (N)
ACCOMPANYING LETTER
online
CHECK PROCEDURES
HAVE FILES READY
AUTHOR DETAILS
TITLE, ABSTRACT, KEYWORDS
BODY TEXT
ATTACHMENTS (FIGURES)
USE SPECIFIED FORMAT(S)


Covering letter
highlight apparent importance of work
justification for work?
summarise main findings
relevance of paper to journal
[reasons for unusual length of paper] - if necessary
[names and addresses 2-3 referees] - if required


REVIEWERS
selected by editor
KNOWLEDGEABLE
OBJECTIVE (IMPARTIAL)
DISCRETE
main tasks: assess and advise
SCOPE
PRESENTATION/ COHERENCE
APPROPRIATENESS OF METHODS
APPROPRIATE DATA PRESENTATION
ADEQUATE STATISTICAL DESIGN AND ANALYSIS
ERRORS OF FACT OR INTERPRETATION
REFERENCES AND CITATIONS
OVERLAPS AND DUPLICATION
DISCUSSION
RECOMMENDATION (CONFIDENTIAL)


Decision
ACCEPT
REVISE
REJECT
MINOR
MAJOR
WRONG SCOPE
POOR SCIENCE
RE-WORDING
CLARIFICATION
EDITING
RE-STRUCTURE
RE-ANALYZE
REDUCE LENGTH
GEOGRAPHICALLY TOO NARROW (PAROCHIAL)
CONTENT NOT SUITED TO JOURNAL
Accept
Re-review

Proof reading – follow the instructions

PROOF-READER'S MARKS

MARK IN MARGIN	MARK IN TEXT	INSTRUCTION	CORRECTED TEXT
a/	He made his m/rk	*substitute with correct letter*	He made his mark
⁋	He made his mark	*take out and close up*	He made his mark
Σ	The hall/mark of perfection	*take out and close up*	The hallmark of perfection
c/	He ma de his mark	*close up*	He made his mark
⌊/	⌊He made his mark	*bring to mark*	He made his mark
tr./	He his made mark	*transpose*	He made his mark
stet /	He made ~~his~~ mark	*do not change*	He made his mark
t(?)/	He made his mark	*query to author*	He made this mark
N.P./	He made his mark. It is	*make new paragraph*	He made his mark. It is
wf./	He made his m/rk	*wrong fount letter*	He made his mark
□/	He made his mark	*indent em space*	He made his mark
lc./	He made his Mark	*substitute with lower-case letter*	He made his mark
s. caps /	He made his mark	*substitute with small capital*	He made his mark
caps/	He made his mark	*substitute with capitals*	He made HIS mark
ital./	He made his mark	*put in italics*	He made *his* mark
rom./	He made *his* mark	*put in roman*	He made his mark
bold /	He made his mark	*put in bold face*	He made his mark
⊙/	He made his mark/	*insert period*	He made his mark.
✓/ OR ✓	He made John s mark	*insert apostrophe*	He made John's mark
'/ ✓/ OR ✓ ✓	He made his mark/	*insert quotation marks*	He made his 'mark'
=/	This is a trade mark	*insert hyphen*	This is a trade-mark
#/	He made hismark	*insert space*	He made his mark
eq. #/	He made his mark	*make equal spaces*	He made his mark
x	He ma his mark	*repair, replace broken letters*	He made his mark
‖	‖ He made his mark	*align*	He made his mark
*/ OR */	He made his mark	*insert reference mark*	He made his* mark
r.o./	It was resolved, that the	*run on*	It was resolved, that the
spell /	14 voted against	*spell in full*	Fourteen voted against
em —/	He made his mark/	*insert em rule*	He made his mark —
en —/	14/16 mm	*insert en rule*	14–16 mm
═	He made his mark	*straighten*	He made his mark
,/	He made his mark/	*insert comma*	He made his mark,
(/)	He made his own mark	*insert parentheses*	He made his (own) mark
:/	Agreed that the Council	*insert colon*	Agreed: that the Council
9/	He made his mark	*turn round*	He made his mark
2/	H0	*insert as subscript*	H_2O
a/ OR a/	120,738	*reset as superscript*	$120{,}738^{a}$

This is in your manual

Old! now you usually get proofs in digital format, with built-in proofing tools

Saturday

Session 7

Ethical issues

11h00-12h30

Some Ethical Issues

- Authorship (and changes in authorship)
- Acknowledgements
- Copyright
- Intellectual Property Rights (IPRs)
- Plagiarism
- Confidentiality
- Data manipulation/fabrication
- Dual submission
- Duplication or replication

Authorship

- Multi-authored papers now more common
- Limit authorship to those contributing substantially to two or more of the following:
  - Planning
  - Doing the research
  - Analyzing the results
  - Writing the paper

Acknowledgements

- Recognize those who have contributed to the research but not sufficiently to be considered as an author:
  - Technical assistants
  - Local people who contributed information
  - People who commented on the draft paper
  - Reviewers (anonymous or not), depending on their contribution
  - People who contributed ideas
- Don't forget to acknowledge funding agencies or sponsors!!!

Plagiarism

Major

"Unattributed use of large portions of text and/or data, presented as if they were from the plagiarist."

Minor

"Minor copying of short phrases only; no misattribution of data."

Access to the Internet is facilitating plagiarism, but also making it easier to track down

Some Ethical Issues

- Authorship (and changes in authorship)
- Acknowledgements
- Copyright
- Intellectual Property Rights (IPRs)
- Plagiarism
- Confidentiality
- Data manipulation/fabrication
- Dual submission
- Duplication or replication

Website on Publication Ethics:

Blackwell Publishing

http://www.blackwellpublishing.com/Publicationethics/

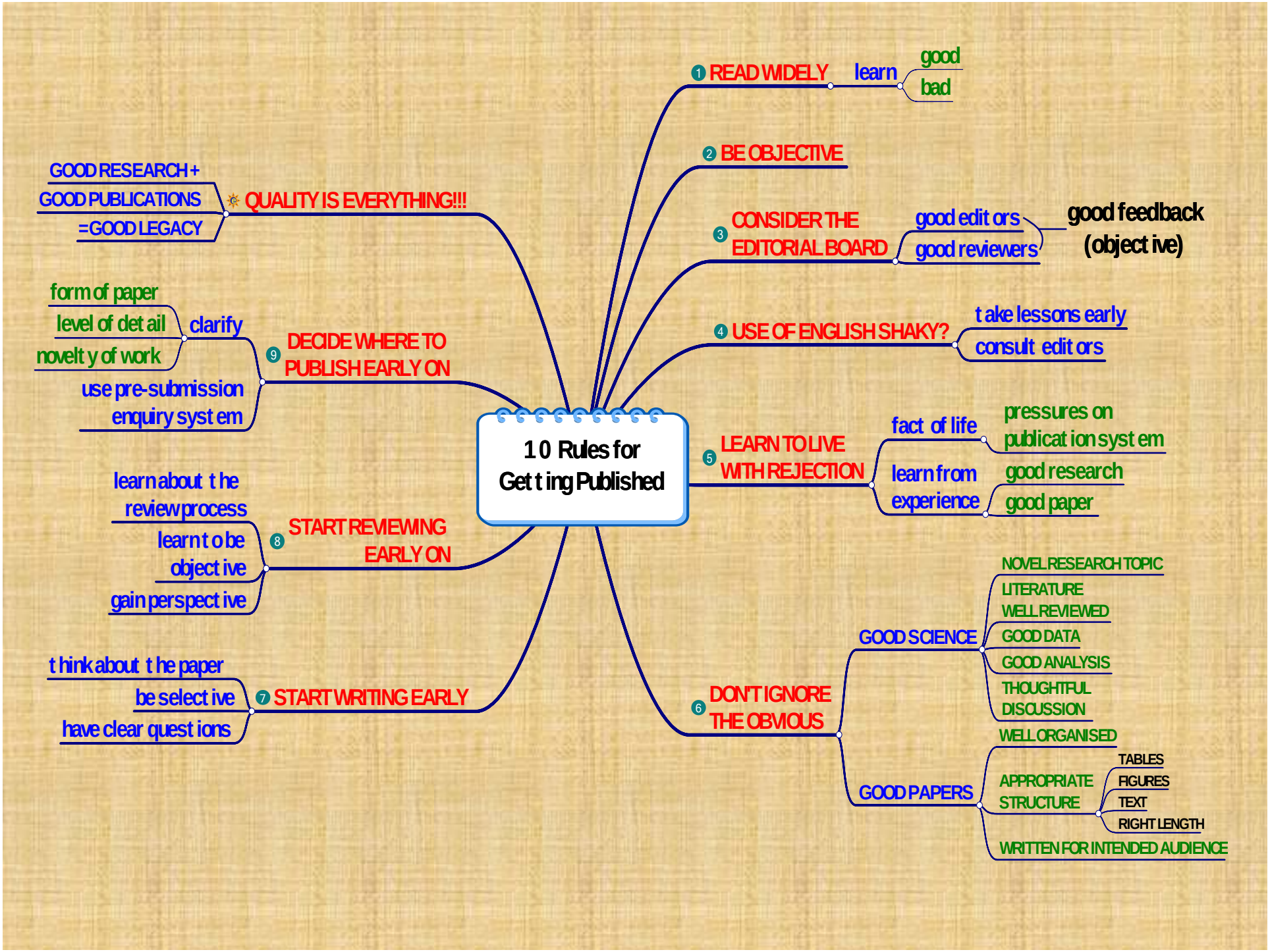




Summary

10 rules for getting your work published

Bourne, P.E. (2005). Ten simple rules for getting published. *PLoS Computational Biology* **1**(5), 341-342


10 Rules for Getting Published
1 READ WIDELY
learn
good
bad
2 BE OBJECTIVE
3 CONSIDER THE EDITORIAL BOARD
good editors
good reviewers
good feedback (objective)
4 USE OF ENGLISH SHAKY?
take lessons early
consult editors
5 LEARN TO LIVE WITH REJECTION
fact of life
pressures on publication system
learn from experience
good research
good paper
6 DON'T IGNORE THE OBVIOUS
GOOD SCIENCE
NOVEL RESEARCH TOPIC
LITERATURE WELL REVIEWED
GOOD DATA
GOOD ANALYSIS
THOUGHTFUL DISCUSSION
GOOD PAPERS
WELL ORGANISED
APPROPRIATE STRUCTURE
TABLES
FIGURES
TEXT
RIGHT LENGTH
WRITTEN FOR INTENDED AUDIENCE
7 START WRITING EARLY
think about the paper
be selective
have clear questions
8 START REVIEWING EARLY ON
learn about the review process
learn to be objective
gain perspective
9 DECIDE WHERE TO PUBLISH EARLY ON
clarify
form of paper
level of detail
novelty of work
use pre-submission enquiry system
QUALITY IS EVERYTHING!!!
GOOD RESEARCH + GOOD PUBLICATIONS =GOOD LEGACY