Start with the Conclusion

• What is the main point of the paper
• Only 1 point per paper (short paper)
• Essential to know exactly what it is
  – Conclusion can change as you write
• Whole paper must be structured around conclusion
Build paper around Conclusion

• Whole paper should be built around conclusion
• Paper should tell a story, leading up to the conclusion
• Whole structure of paper must be based on the conclusion
Main point of paper

- Rarely can have more than a single main point
  - Readers won’t pay attention to more
- Particularly true for high impact journals
  - Science, Nature, PRL
- Longer paper – achival
  - Can have more than one point
Introduction

• Most important part – must raise interest
  – Write it once,
  – then revise,
  – then write the paper,
  – then write the introduction again
• MUST introduce the main point.
• Should not introduce more than this.
Introduction

• General introductory sentence
• Establish interest in thing you will solve
• Put it in perspective with other literature
• Make point that the key unknown thing is exactly what the paper is about
  – Must introduce the work of the paper, not other work
• Finish with implications of what you have done
Introduction

• Follow introduction with ‘In this Paper, we…’
• First sentence is generic introductory sentence
• Second sentence explains the major
• Put it in perspective with other literature
• Make point that the key unknown thing is exactly what the paper is about
  – Must introduce the work of the paper, not other work
• Finish with implications of what you have done
Figures

• Choose figures before writing text
• Figures must tell a story
• Should lead to final point of paper
  – What is the conclusion?
Figures

- Reader’s eye goes to figure when you say in Fig. x.
- Don’t let reader’s eye go until you have said what to look for.
- Always start with the most important thing.
- Explain full figure in text, not just in caption.
  - Exception is sometimes Science, Nature.
Story

• Each paper must tell a story, be interesting
• Format:
  – Start with first part of data
  – Explain this, compare to theory or expectation
  – Suggest some sort of implication
  – Use second half of data to confirm
Grammar

• Use present tense
  – More immediate
  – Won’t get confused about tenses

• Use parallelism
  – Adds emphasis
  – Must be direct parallelism to work

• Don’t use (parentheses), or ie
  – Usually just being lazy

• Never say as shown below – keep order clear
No Jargon

• Don’t use “In order to…”
  – Use “To…”

• Don’t use “On the other hand…”
  – Unless you start with “On the one hand…”

• Explain all acronyms before using

• Don’t start a sentence with an abbreviation or an acronym
Segues

• Most important part of flow
• Each paragraph, section needs a segue
• Don’t use banal or glib segues
  – “Now we turn to such and such”
• Don’t introduce paper by “In recent years there has been a lot of interest in …”
  – If there is no interest, why are you writing the paper
  – Make everything count
Conclusion

• Short paper – should not be a summary
• Should instead be a perspective
• Long paper – ok to have a summary
• But, still need a perspective at end