

REPOA 2013: Writing for Academic Publication

Every day:

- morning session: lecture, exercises, questions and discussion
- afternoon session: Computer room, apply morning session to own draft, some additional, computer-related exercises, questions, discussion

This is a provisional schedule!

Monday

morning

How journals work
 What does 'new' mean?
 Abstracts: basic structure
 Introductions: basic structure

afternoon

downloading information for authors
 downloading papers/ target journal
 revising abstract
 revising introduction

Tuesday

morning

workshop draft abstract expectations
 workshop draft introduction moves
 comments on reading and writing
 the basic pattern in research articles

afternoon

further revision as needed
 web: finding / requesting papers
 web: checking definitions and usage

Wednesday

morning

workshop designing research
 what to include as background
 presenting findings
 discussing findings
 How to see the readers' points of view

Wednesday

afternoon

revising own drafts as needed
 web strategies: as needed
 marking the reader's point of view
 (yellow)

Thursday

morning

the difference between a first and
 later drafts
 more details about conclusions
 Revising from the reader's point of
 view: yellow and a little blue
 showing readers the 'important
 new information' (blue)

afternoon

guided practise with the colours,
 and revision

Friday

morning

quotations and citations
 exercise: designing graphics
 more revising with yellow and blue
 submission-to-acceptance and
 beyond

afternoon

guided writing / editing practise
 working together beyond this week

Monday: How journals work, Abstracts, Introductions, downloading information for authors of target journal, downloading papers from target journal

The Target Journal

Which story are you telling?

Consider your 'candidate' journals

Expand your options before you narrow them. Your own reading is a good place to look for candidates. Many researchers make the mistake of looking only at impact factors, but impact factors are not the only thing to consider. Instead, consider:

- journals you are reading to make sense of your research,
- journals that print the articles cited by the authors you read,
- journals you might find by searching a few of the main online databases. Pretend that your paper has already been published, and use a keyword search to try to find articles related to it. Investigate the journals that appear in your search results.
- Asking colleagues (or your supervisor) for advice, preferably with a preliminary list of journals in your hand (even if the list only has two names on it). Having the names of some journals will show that you're not trying to get them to do all the work.

Topic is often less a factor than approach!

- Would your current paper project fit in this range of topics?
- Which approaches or theoretical perspectives are favoured in the journal?
- Who can do things with the information (applied, pure research, policy-oriented or whatever) in the journal? Are the parts of your work that would be most interesting to these people the parts you intend to write about?
- What do all the readers' do? What range of activities? Can you write for all of these readers?

Once you are looking at a single target journal, download three things from the journal for reference:

- a paper on a similar topic (for a sense of how much background information readers will need on your topic.) You will need this paper later.
- a paper using a similar approach (again, you will need this paper later, when considering how much detail will be expected to provide).
- the Instructions for Authors.

What are journals looking for in a paper? One of these:

- Previously unreported data/observations
- New ways of collecting good data/observations
- Using existing methods of data collection in a new way
- New theory
- Combined existing theories in a new and useful way
- Applied existing theory in a new way/area
- Used a new type of analysis
- Applied existing analytical techniques in a new way
- Made a new combination of existing types of analysis
- Found something unlike what others have seen in the same type of situation
- Covered an area covered before by others, but found something different or changed
- Made more sense of literature in this area than existing reviews (potential review article?)
- Confirmed what others have found, but in a new area/region
- Extended what was known about an area or situation
- Other?

ONE of these is enough!

ABSTRACTS

Note: The abstract covers only this paper or report, not any larger research project of which it may be a part!

A simple structure (what readers expect, and where they will find it):

1. What did you want to find out?
2. What did you do to find out?
3. What did you find?
4. So what? (implications or larger meaning or importance, etc.)

INTRODUCTIONS

A simple structure (what readers expect, and where they will find it):

1. The context or scene. What *is*.
- 2a. What has been done by others (or even by you, in a previous paper)
- 2b. What has NOT yet been done/published. The gap
- 3a. Turn attention to this paper, which will fill that gap.
- 3b. a detail about the paper that will help create the right expectations in the reader

Example

The Quality of Aid: measuring trends in donor performance. Howard White & Lois Woestman (1994) <i>Development and Change</i> , 25(3):527-54.	
<i>(1): orientation to topic. 'While A,B' has been used to zoom in (away from the very general opening, used because not all of their audience shares their economic expertise)</i>	There are many indicators that can be used to judge the quality of aid. Some are not easy to measure (e.g. the degree of popular participation and, to a lesser extent, poverty orientation). While we consider these aspects important, we do not deal with them in this paper. (Rather, we concentrate on four aspects of a donor's aid programme which are readily quantifiable: (1) volume – the amount of aid given; (2) concessionality – the financial terms and conditions under which it is given; (3) tying – the extent to which a recipient country is required to use aid to purchase goods from the donor country; and (4) allocation – its geographical allocation to recipients.
<i>(2a): what's been done by others.</i>	Data on these four measures are published regularly by the Development Assistance Committee (DAC). There has been some academic attention to describing trends in the allocation of aid (e.g. McGillivray, 1989; White and McGillivray, 1992). Discussion on aid tying began with the seminal work of Bhagwati (1967), and has been recently analysed in detail by Jepma (1991). Schmidt (1964) and Leipziger (1983) inter alia have addressed questions of the terms under which aid is given.
<i>Move 2b (what needs to be done: there have been few attempts...)</i>	However, with the exception of Mosley's (1985) aid quality index, there have been few attempts to produce an overall picture of these quantifiable aspects. In particular there is no analysis of trends in these indicators over time, or an assessment of achievements against the historical evolution of DAC targets.
<i>Move 3a (calling attention to this paper)</i>	This paper fills this gap.
<i>M3b is omitted here (it's long) but they do describe their main intention</i>	We deal, in parts 2 to 5, with volume, concessionality, tying and geographical allocation in turn. Trends...[etc.]

Introduction exercise instructions

The following short introductions have been scrambled.

Assign each sentence to its 'move' (1, 2a, 2b, 3a, 3b). These abstracts have been chosen because they are short, have all five pieces, and are unlikely to be familiar to you. They are not perfect.

Do this with one or two other people. There are "right" answers, so don't just agree to disagree!

Do the first exercise, then we will discuss, and THEN do the second one.

Introduction Exercise A

The Thermal Conductivity and Specific Heat of Epoxy Resin From 0.1 To 80K

S. Kelham & H.H. Rosenburgh (1981), *J. Phys. C:V Solid State Physics* (14).

- 1) Nevertheless more experimental data are required, and in particular it would seem desirable to make experiments on glassy samples whose properties can be varied slightly from one to the other.
- 2) The thermal conductivity has a plateau which is usually in the range of 5 to 10K, and below this temperature it has a temperature dependence which varies approximately as T^2 .
- 3) Some progress has been made towards understanding the thermal behaviour by assuming that there is a cut-off in the phonon spectrum at high frequencies (Zaitlin and Anderson, 1975a, b) and that there is an additional system of low-lying two-level states (Anderson et al., 1972; Philips, 1972).
- 4) The specific heat below 4K is much larger than that which would be expected from the Debye theory and it often has an additional term which is proportional to T .
- 5) The present investigation reports attempts to do this by using various samples of the same epoxy resin which have been subjected to different curing cycles.
- 6) The thermal properties of glassy materials at low temperatures are still not completely understood.
- 7) The thermal conductivity and specific heat of epoxy resin from 0.1 to 80k
- 8) Measurements of the specific heat (or the diffusivity) and the thermal conductivity have been taken in the temperature range 0.1 to 80K for a set of specimens which covered up to nine different curing cycles.

Introduction exercise (B) (See directions)

Equine lentivirus, comparative studies on four serological tests for the diagnosis of equine infectious anaemia

F. Burki, W. Rossmannith & E. Rossmannith, (1992) *Veterinary Microbiology* 33(1-4):353-60.

- 1) A commercially competitive ELISA has been found to give practically equivalent results to the Coggins test, but the sensitivity of this market product is intentionally kept marginal in order to avoid false positives.
- 2) Equine lentivirus: Comparative Studies of Four Serological Tests for the Diagnosis of Equine Infectious Anaemia.
- 3) It was not clear, however, which of these additional tests would provide the most accurate and reliable results.
- 4) The second (non-competitive) commercial ELISA has been found to give inconsistent results, which would create great turmoil among horse owners by giving false positives; caution is also indicated when interpreting Western blots.
- 5) The research presented here compared and evaluated the use of Western blots and two ELISA in clarifying the results of Coggins tests.
- 6) Serological diagnosis of equine infectious anaemia is of necessity group-reactive, because viral envelope components as well as the host's immune response to them undergo rapid antigenic change.
- 7) Recently, ELISA tests have been introduced for faster and theoretically more sensitive serodiagnosis, while Western blots have been used to clarify doubtful results obtained in Coggins-tests.
- 8) Since 1970 the agar gel-immunodiffusion test ("Coggins test") has been the diagnostic method of choice.

Tuesday

workshop draft abstract expectations

Ideally in groups of three

Exchange abstracts

Do not discuss with the author!

Read the abstract, making notes about where the 4 pieces are

If a piece is missing, make an educated guess (and note it down)

Grammar and language are not yet important, so no editing

Write yourself a note on what you think the paper itself will be about, what it will cover, and any expectations you have based on the abstract.

Exchange again, so you have read the other abstract (if the group is 4 people, you will need to do this twice)

Once everyone has read the abstracts:

Discuss one person's abstract. Do not look at or speak with the author. This person will NOT be part of the discussion, but should listen carefully and take notes where necessary (for instance, if the group expects something very different from what is intended, or misunderstands something).

Once you have said what you have to say, let the author speak.

Take turns until all abstracts have been discussed.

workshop draft introduction moves

Exchange introductions

Again: do not discuss with the author!

Read the introduction, marking each move.

If a move is missing, make an educated guess (and note it down)

Grammar and language are not yet important, so no editing

Exchange again, so you have read the other introduction (if the group is 4 people, you will need to do this twice)

Once everyone has read the introductions:

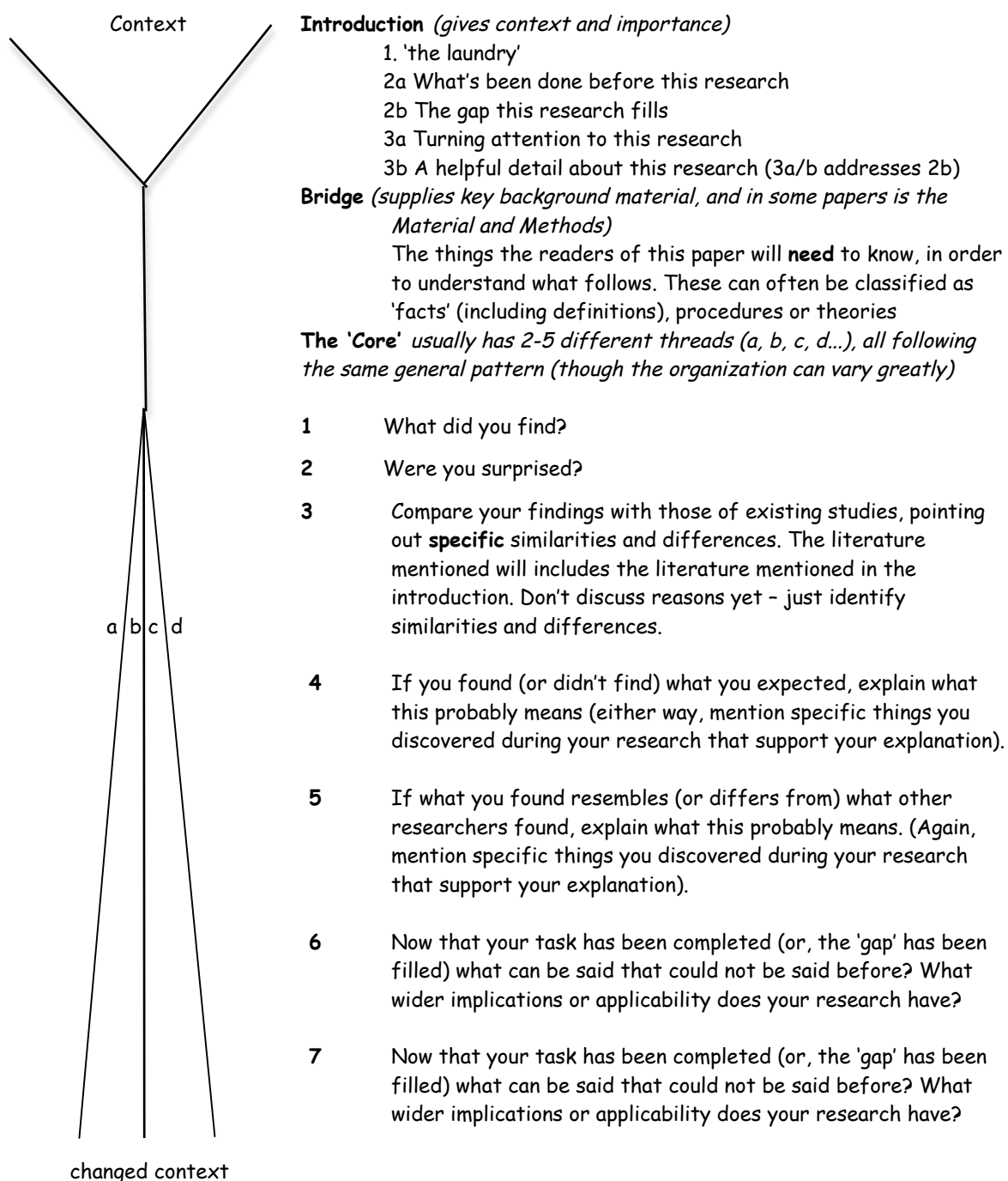
Discuss the structure of one person's intro. You do not need to agree. Do not look at or speak with the author. This person will NOT be part of the discussion, but should listen carefully and take notes where necessary (as above).

Once you have said what you have to say, let the author speak.

comments on reading and writing

notes:

The basic pattern in research articles



Address of google ngram viewer: <http://books.google.com/ngrams>

Wednesday

Some of the differences between the five sentences below may seem subtle at first, since they all refer to the same event:

1. Community leaders challenged the official report.
2. The leaders in the community challenged the official report.
3. The official report was challenged by community leaders
4. Challenges to the official report were made by community leaders.
5. The challenge to the official report was led by community leaders.

All five sentences are grammatically correct, and all of them are short. The first two are 'active'; the last three are passive. None is 'better' than the other, because what's 'best' depends on what the author wants to put on camera. The one that is best will be the one that best fits the camera angle that can link together the aspects needed for the author's version of the story.

1a. The reaction within the community was mixed. Community leaders challenged the official report. Teachers welcomed it, as did parents. However, childless families in the neighbourhood were generally not in favour. [*'was mixed' at the end of the first sentence signals a list showing that mix*]

2a. The leaders in the community challenged the official report. They were unable to rally their usual constituencies in opposition, however, since reactions among their constituents were more mixed.

3a. After years of study, the county administration released its final opinion, but it did not find general acceptance. The official report was challenged by community leaders. An alternative report was produced that considered the effects the new road pattern would have on local school traffic and businesses.

4a. Challenges to the official report were made by community leaders. Local shopkeepers objected to the reduced traffic flow by their shops, potentially discouraging customers. Others felt that streamlining traffic by the school to make drop-off easier discouraged walking in the area.

5a. It is unlikely that the recommendations will now be implemented, given widespread opposition. The challenge to the official report was led by community leaders. It was taken up, though, by most residents and local businesses.

The grammatical subject of the main clause is 'on camera' and makes the link to the sentence before, forming the organizing logic of the paragraph.

Readers usually look at the grammatical subjects (not the topics) of sentences to carry them from one sentence to the next. They also, in some cases can use a link from the end of one sentence to the beginning of the next (as long as the link isn't a vague association).

Think of the main part of a sentence as [agent][action][goal]. The agent will already be known to the reader. The goal is new. The more complex the sentence, the more important this becomes.

In your first draft, spend more effort trying to figure out WHAT you want to say. How to communicate this to others must be left for a second step (this is editing).

Workshop: designing a piece of research

Exercise:

In small groups: consider the following and make very general a research plan to address the following question:

What has the World Cup's short-term impact on South Africa been?

To answer this question, are there any terms in the question you need to define?

What do you expect the answer to be?

What reasons do you have for expecting this?

How will you test whether your assumptions are correct or not?

What facts will you need to establish to answer this question?

What data will you need to collect to determine these facts?

Can you see a way to get this data through fieldwork?

What implications might your answer have (and for whom or what)?

Are there research skills your group would need to acquire in order to do this research?

What to include as background: practical, procedural and theoretical

In some papers (literature reviews, for example), setting up the procedure may take no more than a word or sentence or two, and sometimes this is so brief that it can be included in the third move of the introduction. However, for most papers, you will need to say much more, particularly when readers are unfamiliar with your technique or might disagree with it or expect a step-by-step description. In the social sciences in particular, a lot of what a paper shows is the *usefulness* of one or another definition, and much is written about competing definitions and the competing theories that underlie them

To get a sense of what you can expect your readers to know, look at the articles your target journal has already published. Pay closest attention to articles using a technique similar to yours. A few questions that should help you to think about what to include (this is not a complete list!) include:

- How do you know that this approach will be useful for examining what you want to examine?
- What was your study design?
- What (or who) were the subjects of your research/observations, and why?
- How were they chosen/approached/included?
- What methods were used to take measurements/collect data/information?
- Were any outside materials (statistical programmes, etc.) used?
- Did you make any interventions (were you a participant in any way)?
- How were your findings derived from the raw data (or observations) you collected?
- Will you need to define your key concepts (and possibly also important themes or patterns) for these readers?
- Will you need to explain why the factors you chose to study are actually useful for understanding the problem, or will readers know?
- Will you need to distinguish your definitions from competing definitions, and/or explain their use and usefulness?
- If you are writing a review, will you need to explain why the particular themes or categories you use to make sense of the literature are particularly useful?
- Will you need to explain any of the practical or procedural decisions?
- Will your readers know your techniques? If readers are unfamiliar with your technique or might disagree with it, this will require more detail and explanation.

Look at the articles your target journal has published, to get a rough idea of how much detail to include, and what can be safely omitted.

Once you know the main points you want to cover, write these very briefly on small scraps of paper like 'sticky notes' and arrange them in an order that you think a reader will find sensible. This will be your outline for this part. Test this pattern by running through it quickly with the rest of your group. As they listen, they need to take notes on:

- how well the 'story' flows
- whether the purpose is always clear, or is sometimes confusing
- whether their expectations are always met as soon as they are created (did you expect something that didn't appear? Are the logical links given soon enough?)

As a listener, please phrase these in terms of your reactions as you try to understand. Avoid attempting to take over someone's paper (so no "you should"). Keep your comments focused on your reactions, with phrases like "I expected to hear..." or "I was lost for a few minutes at the point when" or "so I think you are saying that...", etc.

The Writer's Camera

This is for editing *only* (never for the first draft!)

First guideline: Each paragraph has a single message or purpose, which may be explicit or implicit

What do you think the message in each of these paragraphs?

- (a) Most households without access to the Department's water supply depend on unprotected sources such as wells, and this dependence was greatest at Chake Chake. The largest demographic group lacking access to Department water are farmers. Over a quarter (26%) of farmers depend on unprotected wells for drinking water.
- (b) Each household was visited daily for seven consecutive days, and asked what members had done during each hour of the previous day. (The four hours from midnight to 4 a.m. were combined into a single slot on the incorrect assumption that everyone would be asleep.) For each hourly slot, respondents could name up to five activities. Where more than one activity was reported, the respondent was required to specify whether activities were simultaneous or sequential.
- (c) The FAO (1997) reports that Cameroon is endowed with a forested area of 19,598,000 ha., of which 18,000,000 ha are located in the humid forest zone. Eba'a (1997) estimates that during the last decade the share of forest activities in the economy has significantly increased: in 1995 the export of timber products amounted to \$US 231 million, representing 19.8 per cent of the total value of Cameroon's exports.

Second guideline Grammatical subjects are in the centre of the picture. They tell whose story this is, and provide the most (sometimes all) continuity. They are familiar, so never the important new action. Instead, they *anchor* the main action.

Compare (the grammatical subjects are underlined):

<p><u>Regional and urban planners in the Netherlands</u> have become increasingly interested in urban management. <u>They</u> are responding to the increasing differentiation in the demand for living environments, which has resulted from an increased diversity of household types. <u>Their task</u> is to develop public space in a way that will lead to such diversity, e.g. basing their plans for new spatial investments on the features of the newly-emerging demand, while having a clear understanding of the features of the current range of living environments. <u>Planners</u> will thus need to know:</p>	<p><u>Regional and urban planners in the Netherlands</u> have become increasingly interested in urban management. <u>The increasing differentiation in the demand for living environments</u>, which has resulted from an increased diversity of household types is putting increasing pressure on them. <u>There</u> is a need to develop public space in a way that will lead to such diversity, e.g. basing their plans for new spatial investments on the features of the newly emerging demand. <u>The features of the current range of living environments</u> must be clearly understood. We will thus need to know:</p>
--	---

Third guideline Put the most important new (to this paper) information in each sentence either before a “;” or at the end of the sentence

Consider: Which assessment would you prefer, if you were the researcher?

- a) This is an exciting, somewhat flawed proposal from a creative researcher. + ? -
- b) This is a somewhat flawed but exciting proposal from a creative researcher. + ? -
- c) This creative researcher has written an exciting, somewhat flawed proposal. + ? -
- d) This creative researcher has written a somewhat flawed, but exciting proposal. + ? -
- e) This exciting proposal from a creative researcher is somewhat flawed. + ? -

Consider:

Draft:

A success story in terms of increasing literacy would be Tanzania. The positive role of state action features heavily in this success of Tanzania's. It took determined effort to reach the specific goals set out by the Tanzanian government's literacy programme, sensibly directed towards increasing literacy throughout the country.

Revisions [there are many ways to revise the above paragraph, but here are two]

Greatly increased literacy is a success story for Tanzania. It illustrates the positive role of state action. **The Tanzanian government's literacy programme** shows how much can be achieved by a determined effort, sensibly directed toward specific goals.

Or:

Tanzania's success story is its massive increase in literacy. **State action** was essential. **The Tanzanian government's literacy programme** achieved so much because it pursued specific goals with determined effort.

Rewrite:

The building industry uses 'turn-key' to mean responsibility for the satisfactory performance of a building in addition to its design, construction and the completion of the building. All sub-contractors are supervised by the building contractor with whom turn-key responsibility lies.

How would you rewrite these sentences to create a smoother flow? (there are several 'right' answers!)

Fourth guideline Think about the 'camera' moving in the paragraph.

Here are a few ways it can move (there are many more, so this is just to show you a few options).

List: Investment was favoured for the following reasons: First, importers found it easy to obtain suppliers' credit with long repayment periods. Second, foreign aid was mainly project aid, with an in-built bias towards investment. Third, bias towards investment was deeply ingrained in overall state planning and in public sector enterprises.

Steady shot: The drop in Tanzanian export crop production between 1975-1985 was dramatic. This fall in marketed output has been estimated (Ellis 1984: 47) at 23% of the value of this source of earnings, so was clearly significant and sustained. However, while the actual fall has been agreed by all commentators, its underlying causes have not.

Chain of reasoning: Export crop producers have limited avenues for selling their crops, namely through official channels or by smuggling the crop abroad. Such international smuggling requires intermediaries with the necessary international contacts and ways to circumvent the nation's current exchange market. This means that the value of such smuggled crops is not included in national accounts.

Zooming in: 'Peace' is a descriptive term, commonly meaning the end of violence, but with many offshoots of meaning. Reconciliation is one of these offshoots. One form this can take is a Truth and Reconciliation Commission (TRC). The TRC in South Africa is perhaps the best model of such a commission.

'Panning' across a landscape or through time: In the 1970s By 2000, Currently

fifth guideline: shorter noun phases before long ones one (unless the long noun phrase is at the centre of the camera).

The trial court's conclusion that the defendants made full disclosure of all relevant information bearing on the value of Knaebel's stock is clearly erroneous.

Assuming that 'the trial court' stays as the grammatical subject, one possible solution is:

The trial court erroneously concluded that the defendants made full disclosure of all relevant information bearing on the value of Knaebel's stock.

In this short paragraph, look for places where a long noun phrase is interrupting the flow, and edit it into a better position. Remember the camera guidelines (an overall meaning, a thread through the subjects, a pattern). Information that doesn't seem to fit can be 'set aside' for a different place in the larger text. Change what you need to change, except essential meaning:

1. A standard promoted by all countries would substantially reduce the losses we are currently seeing. Such a standard might be achieved if countries look for shared interests and avoid arguing against the others for purely political reasons. A renegade state that refused to cooperate in setting such a standard and then refused to abide by it, could cause the standard to fail.

Sixth guideline: To make lists visible, give the list items parallel grammar

draft:

Three things will keep SARS from becoming a global pandemic: the strong seasonality of the virus, identifying those infected with SARS is relatively simple, and the global response to SARS has been prompt and forceful.

edited (one possibility):

SARS will be prevented from becoming a global pandemic by three things: the strong seasonality of the virus, the ease with which SARS is identified, and the prompt and forceful global medical and scientific response.

1. This study describes the effects of three scenarios: (a) no treatment, (b) a treatment lasting three days, and (c) an eight-day treatment.
2. On farms where the probability of spreading of *Streptococcus uberis* to other cows is low, the average net profit of a three-day treatment and an antibiotic treatment lasting eight days was €4.00 and €-28.88 respectively.
3. Clinical studies, research on immune systems, researchers in genetics, and the study of biochemistry have all greatly expanded our understanding of the progression of celiac disease.
4. This created conditions for the rapid and spatially concentrated growth of the local population, for urbanization, for livelihood changes associated with this, changed in the use of land, and the relations between people and land.

Seventh guideline: don't overload readers

1. The lecturer began by pointing to large diagrams of the skeletons of the common horse and polar bear, *Equus caballus* and *Ursus maritimus* respectively.
2. Those who depend on cattle products and shun other foods are considered poor even when their animals can fetch a great deal of money, for instance the Bahima and the Karimojong in western and northeastern Uganda respectively.
3. The programme that is recommended for adoption would accomplish the reduction of transport-derived disease transmission with the desired degree of efficiency. According to our estimates the cost of this new policy over a period of four years would be on the order of approximately € 1.2 million.

4. At this point in time we are engaged in a re-evaluation of the protocol.
5. In a sample of 109 learners, males and females were 25% and 75% respectively.
6. Of the sample households, 80% and 97.5% in Gibe Lemu and Gambela Terre possess their own irrigable plots respectively.

Assume you were actually involved in the subject, and so were at a conference by choice.

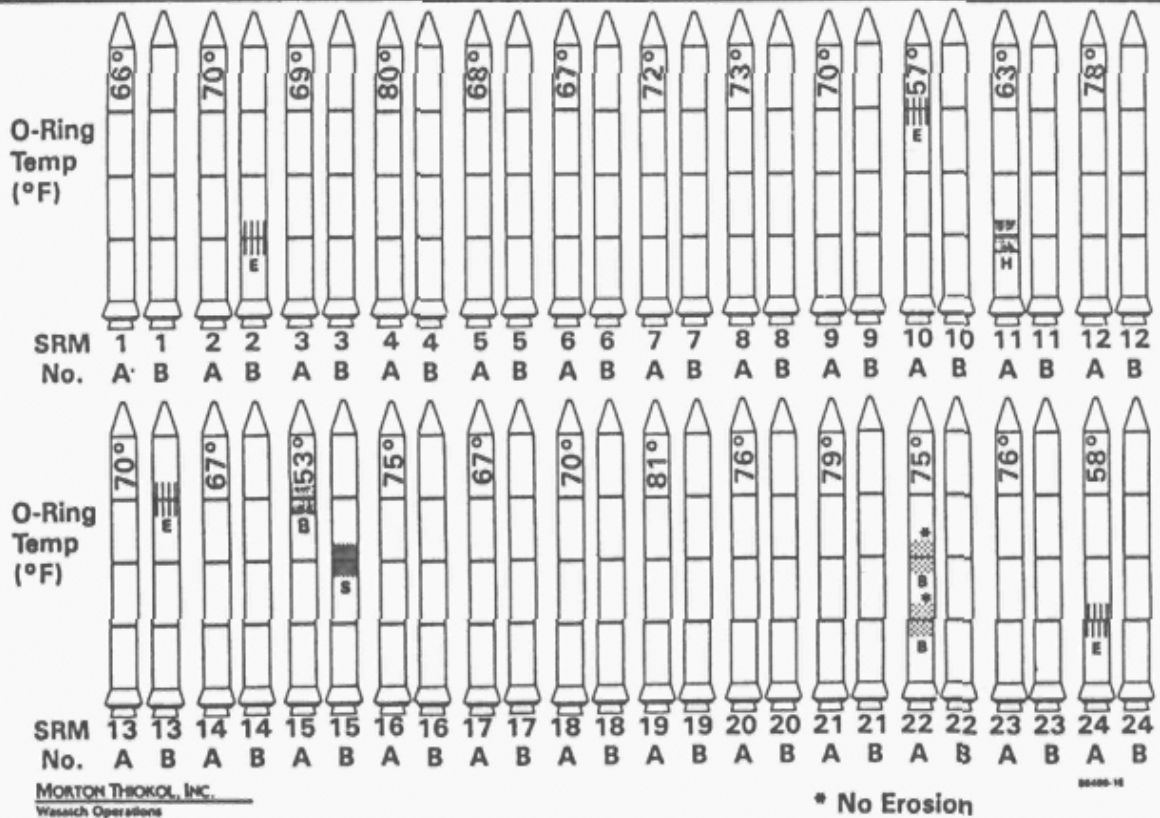
The programme lists only two speakers for 10:00 a.m., and you are going to go to one. Which one?

Brown's version	Smith's version
<p>In the first experiment of the series using mice it was discovered that total removal of the adrenal glands effects reduction of aggressiveness and that aggressiveness in adrenalectomized mice is restorable to the level of intact mice by treatment with corticosterone. These results point to the indispensibility of the adrenals for the full expression of aggression. Nevertheless, since adrenalectomy is followed by an increase in the release of adrenocortico-trophic hormone (ACTH), and since ACTH has been reported (P. Brain 1972) to decrease the aggressiveness of intact mice, it is possible that the effects of adrenalectomy on aggressiveness are a function of the concurrent increased levels of ACTH. However, high levels of ACTH, in addition to causing increases in glucocorticoids (which possibly accounts for the depression of aggression in intact mice by ACTH) also result in decreased androgen levels. In view of the fact that animals with low androgen levels are characterized by decreased aggressiveness the possibility exists that adrenalectomy, rather than affecting aggression directly, has the effect of reducing aggressiveness by producing an ACTH-mediated condition of decreased androgen levels.</p>	<p>The first experiment in our series with mice showed that total removal of the adrenal glands reduces aggressiveness. Moreover, when treated with corticosterone, adenalectomised mice became as aggressive as intact animals. These findings suggest that the adrenals are necessary for animals to show full aggressiveness.</p> <p>But removal of the adrenals raises the level of adrenocorticotrophic hormone (ACTH), and P. Brain (1972) found that ACTH lowers the aggressiveness of intact mice. Thus the reduction in aggressiveness after this operation might be due to the higher levels of ACTH which accompany it.</p> <p>The high levels of ACTH have two effects. First, the levels of glucocorticoids rise, which might account for P. Brain's results. Second, the levels of androgen fall. Since animals with low levels of androgen are less aggressive, it is possible that removal of the adrenals reduces aggressiveness only indirectly: by raising the levels of ACTH, it causes androgen levels to drop.</p>

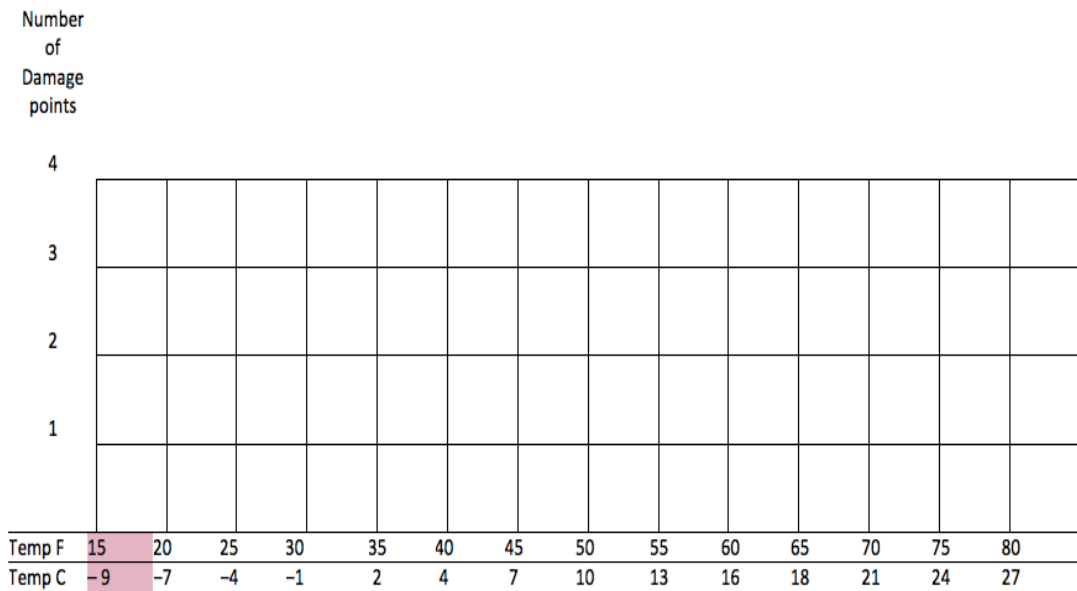
Using sources exercise. In one paper, in your target journal, how many, and where (then compare):

	intro	background	Findings, discussion	conclusion
Direct quotations				
Citation				

History of O-Ring Damage in Field Joints (Cont)



INFORMATION ON THIS PAGE WAS PREPARED TO SUPPORT AN ORAL PRESENTATION AND CANNOT BE CONSIDERED COMPLETE WITHOUT THE ORAL DISCUSSION



↑
Predicted temperature on date of launch