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SUPPORTING PHD WRITERS

UNIVERSITY OF ABERDEEN

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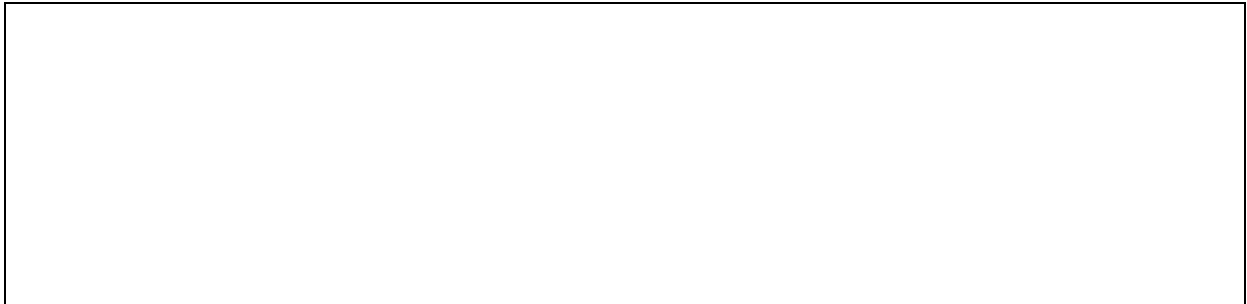
Contents

Part I: Planning and Managing a Writing Project	page 2
GTED: four components of effective writing	page 2
Writers' maxims	page 3
Critical reading form	page 4
Writing a critical summary of literature exercise	page 11
Starting to develop your research hypothesis	page 13
Part II: Academic Style	
Thinking about sentences	page 16
Tips for editing sentences	page 17
Paragraph structure	page 18
Academic voice	page 22
Part III: Planning, Outlining and Structure	page 24
Generic thesis structure	page 24
Creating a thesis outline	page 24
Part IV: Introductions and Conclusions	page 37
Introductions	page 37
Introductions for Research Articles	page 38
Creating a Research Space (CARS) Model	page 39
Introductions to thesis chapters	page 44
Thesis introductions	page 45
Summary of Introduction's Functions	page 45
A model conclusion	page 46
The final chapter	page 47
Part V: How to Write Methodologies	page 49
Part VI: Writing about Evidence and Data	page 51
Structure for Presenting Data in Your Text	page 52
Part VII: Notes on editing	page 49
Appendix	page 52
References and Resources	page 56

Part I: Planning and managing a writing project

Procrastination affects most people to some degree. A great book about writing and procrastination is *The War of Art* by Stephen Pressfield. I highly recommend it. If you are a procrastinator then it's for you.

So what stops writing?



TED with a silent G: The Four Components of Effective Writing:

1. Goals – design smart goals that are realistic and achievable. Big goals should be broken down into smaller more achievable goals, including daily ones.

2. Time – large time scales aren't that helpful. You can be productive in as little as 15mins if your goal is well designed, for example a *Critical Reading Form*. I recommend you break your writing up into chunks from 15mins to 1 hour.

3. Environment – this is key and you need to control your environment to make it work for you. For example, know what time of day you write best at. Also find a place which works for you and make sure you eliminate distractions, turning off smart phones, the internet and emails. You need uninterrupted focus.

4. Discipline – this ties it all together. The key to self-discipline is habit. You need to develop the habit, and that takes time and practice. This requires planning, i.e. goal setting and a commitment to the activity. Try to write every day, even if it is just for 15mins.

Writers' maxims:

1. Writers write and you are a writer
2. If you don't have it on paper you don't have anything to work with
3. Good writing is rewriting
4. Writing is hard and painful so remember that, get used to it, and get writing.

Top tip: always have a note book with you that you can scribble ideas in, experiment with your style or your thinking. Note books are a safe place to try out new things.

Integrating writing and research

An important part of writing a thesis is obviously producing the words. Many writers/researchers encounter difficulties with getting the words on the page. This section introduces some strategies writers can use to generate new writing and develop and articulate new thinking. The two general approaches are 'free writing' and 'generating writing'. A great book on this is Rowena Murray's *How to Write a Thesis*. Below are examples of both useful for PhD writers.

Free writing Exercise: Without key words

We often fall into patterns which make our writing stilted or repetitious. Sometimes you just get stuck for words. The exercise is a good one for breaking you out of patterns or just getting you writing.

Write down five key words to do with your research. Now write a 100-200 word paragraph describing your research topic without using those words.

Writing to record, writing to generate ideas, writing to clarify and refine ideas:

Students sometimes feel they have little to write about early in their studies. The mass of literature is overwhelming and often the note taking strategies students bring over from undergraduate and Masters' research are not fit for purpose at doctoral level. The following writing exercise is designed to help students summarise research, read and relate it critically to their own work in terms of methodologies, relevance and research gaps. It also gives them regular practice at developing a critical style.

Writing about your literature prompt 1: Critical Reading Form

Some probably already do this. Sometimes it can be better to set some parameters to writing and reading. The next two exercises are designed to focus you in on the 'critical' aspects of reading, as well as to get you to practise good note taking and bibliographical habits.

The first exercises is the *Critical Reading Form* which can be filled in after every research paper or book read. This is a good way to keep track of what's been read and develop critical reading skills. Complete the points below by writing in full sentences; however, try not to write too much when reviewing a journal paper, for example, try to summarise it with no more than two to three sentences in each section. Being able to summarise books in the same way is also important, though more challenging due to their size and complexity.

Try writing to a timer and fill this form in in no more than 30mins. Make sure the bibliographic data is correct. If you feel you cannot fill in all the sections don't worry, but

realise that it is important to identify the gaps in your knowledge and use them to direct your reading. If you feel a piece of work is particularly important you can indicate it as such and come back to it later for a closer reading.

Critical Reading Form

1. Authors, title, date, publication title, place of publication, [vol/issue: pp. if a journal paper],
type of copy I have (e.g. paper, PDF, notes)

2. What is this work about?

3. What are the main findings of this work?

4. What gap in our understanding does this work fill?

5. What is the research tradition/approach/method used?

6. How is this work connected to the wider research field? (Mention specific papers/researchers)

7. How is this work relevant to your assignment?

8. What are the limitations of this work? (Mention specific papers/researchers)

9. Useful quotation (optional)?

Code: circle as appropriate

1. Very useful, return to for more detailed analysis
2. Useful and of general importance
3. Relevant but of minor importance
4. Not relevant

Critical Reading Form Tips:

1.) Create a MS Word template of the *critical reading form* which you can open and fill in after each paper. In addition set up a filing system on your PC to organise your notes. Remember to back up all your files, getting in the habit of synchronising your home and university computers and any external drives you have.

2.) You return to important papers and books and add an extra detail to the form, writing a paragraph or page for each section of the form on second and third readings.

3.) Use the forms as examples of your writing and thinking which you can use in supervisory sessions. These forms are good ways to practise your academic style and receive feedback on it.

4.) Many of the new electronic reference management software packages, which help you build accurate bibliographies, also have sections for notes. You can copy in the content of your form to these notes sections.

Note: If you cannot answer any of these questions that is ok to begin with but you should use those gaps to direct your reading. Use this exercise as a way to generate shorter pieces of critical writing which both help you develop your skill as a writer and enable you to get feedback on your writing from your supervisor at an early stage. Remember you can write in

layers, revisiting this exercise time and time again building detail and complexity as your understanding develops.

Prompts

Prompt 1: Summarising your research

Many universities now require doctoral students to fill in forms containing summaries of your research at different stages of the process. With a large and long project it is important for both the university and the individual researcher to monitor progress. It can also be a useful means of reflecting on exactly what you have achieved. For example, some students feel that they have achieved very little because they don't have several thesis chapters to show for their efforts. However, there is a lot of work, like reading, data collection, conference presentations etc... which lies behind the final thesis. This prompt helps you write about it and gives you another opportunity to develop your own style.

Purpose: to help you reflect on what you have achieved and to think about where your research needs to go. It could also be useful preparation for doctoral review panels, or as a talking point in supervision meetings. Write in two or three full sentences completing each of the following prompts.

- My project is about...

- The stage I am at now is...

- The next step is...
- What I am interested in is...
- The original contribution of my work is...
- In the last month I have moved my project on by...
- I need to find out more about...

(Adapted from Murray (2006) *How to Write a Thesis*. p. 74)

Note: although you were only asked to write a few sentence for each of these prompts you could expand the exercise and write a paragraph or a page for each, expanding the time limit to fit.

Writing about your literature prompt 2:

Critical summary of the literature

Your knowledge of the research field will change over time. You will increase your breadth of understanding and, consequently, you will probably reassess earlier assumptions about previous research and your own work. The following prompt is to help you write on what you know about a wider area, rather than just one piece of research, as with the previous prompt. A review of literature should not just be the retelling of everything that has come before. It should be a synthesis of the state of research around your chosen topic, with a particular relevance to identifying a gap in understanding or the limitations of research. What we call ‘critical’ reading and writing is demonstrated when you can do some of the following things. You should be able to draw together important strands of research and demonstrate how they relate to the thesis in a relevant way. You should be able to articulate the strengths and weaknesses of previous work and start to see where gaps in and limitations of research exist and if you are writing a dissertation, how your research would fill that gap. And you should also be able to do this clearly and succinctly by quoting relevant sources but also by summarising and paraphrasing work, supporting it all with appropriate references.

Use the following prompt every three to six months, or whenever you feel your reading has moved on. The exercise asks you to summarise what you know as well as to make your reading explicitly relevant to your research. Write no more than three to four sentences for each of the questions and spend no more than 15 minutes on this. You can also expand this into a longer and more detailed exercise.

Writing a critical summary of literature exercise

1. Who are the most important researchers/theorists to the topic and in what ways are they relevant to your research?
2. What methodologies/approaches/theories are involved in your research and from where are they drawn in the literature?
3. Why are these methodologies/approaches/theories important to your research, i.e. why are you using them, what do they enable you to do and why is that important?

4. What are the limitations of these methodologies/approaches/theories (i.e. who has criticised them and to what extent are these criticisms valid)?

5. What are the most important current questions or problems in your specific area of interest?
(If these questions have been explicitly posed in the research literature who posed them? If the problems/issues/questions are implicit in the literature where and how did you deduce them?)

6. What is the original contribution of your work (i.e. where is the gap in the literature, the problems or questions raised previously either explicitly or implicitly, and how will your work fill that gap)?

Note: If you cannot answer any of these questions that is ok to begin with but you should use those gaps to direct your reading. Use this exercise as a way to generate shorter pieces of critical writing which both help you develop your skill as a writer and enable you to get feedback on your writing from your supervisor at an early stage. Remember you can write in layers, revisiting this exercise time and time again building detail and complexity as your understanding develops.

Writing about your research prompt: Starting to develop your research hypothesis

The following prompts we will look at are intended to help you actively link your research and knowledge of the research literature through your writing. If you are early on in your studies you may struggle to write to these prompts. That being the case, the prompts should then give you an idea of what you don't yet know and, therefore, indicate what you need to do. Once you start gathering data and subjecting it to analysis, you may find that your interpretation of the results changes over the course of your studies. This might be because your reading has expanded and the implications of your findings change in light of this understanding. It is then valuable to return to and reassess your work in relation to the research field and to your thesis as a whole.

Purpose: early in your studies you might use the following prompt to help start thinking about and articulate your research hypothesis. Write in the present-continuous tense to put you in a positive frame of mind for doing research and writing about it, rather than thinking about doing it. Again this is the type of exercise you can use as a talking point in supervision meetings.

- My research question/hypothesis is...

- I am investigating this because...
- The data I look at to investigate this is...
- The research methodologies I am using are...
- I am using these methodologies because...
- I am looking for...
- The original contribution of investigating the topic in this way is...

General Structure of a Literature Review:

Literature Review Process:

1. Personal experience/Funded topic
2. Broad overview scan of the literature
3. Decide on topic and refine keywords (discuss with your supervisor and subject librarian)
4. Download abstract and organise (chronological/by subject)
5. Read and evaluate, sorting into themes/subjects/topics
6. Download full texts, file, read and write review on individual papers/books
7. Re-evaluate topic/research question – redefine search terms (set parameters & define and outline)
8. Search, download and review individual papers
9. Examine/read 2-3 other PhD literature reviews in your topic/discipline

10. Draft an over-arching literature review (set word limit, define sections, clearly define the gap in the literature)

There are many ways you could structure your literature review, however, here is one generic model that works as a model for introductions to chapters as well as research papers (something we cover in more detail in the 2nd year workshop).

Move 1: summarises the background, contextualising literature. This tends to be a less critical part of the literature review, demonstrating what the ‘state of the art’ is and the point from which your research is starting. This is not covering everything in the field but those bits which are necessary to give your work context.

Move 2: this sections should be more intellectually critical, indicating weaknesses in previous work or gaps in our understanding or making a claim for why the field should shift focus. Essentially the rhetorical point of this section of the literature review is create a gap or niche which needs filling.

In your end of year report you should then indicate how your PhD’s ‘programme of works’ will fill the gap you have demonstrated. You should have chosen, developed and outlined an appropriate method and schedule of works. In this way the ‘method’ should be in complement to the literature review.

For a more detailed account of critical reading see Wallace and Wray (2006) pp. 12-13.

For an excellent overview and in depth chapter on preparing a literature review chapter see Glatthorn (1988) chapters 3 and 15.

Part II: Academic Style

Thinking about sentences:

I would like us to think about sentences briefly. This is a subject that we could spend a lot of time on, time which we don't have here. As such, for a much more in depth consideration I would refer you to Helen Sword's *Mastering Academic Style* or a good style guide like Strunk and White's *Elements of Style*, or Stanley Fish's *How To Write a Sentence: and How To Read One*, which are in the bibliography. That said there are a few things you should bear in mind. Read the following three sentences from published works and see if you think they are clear and well written. If not, what is wrong with them? Try and be specific in your descriptions and write in the box below.

1. 'Indeed dialectical critical realism may be seen under the aspect of Foucauldian strategic reversal — of the unholy trinity of Parmenidean/Platonic/Aristotelean provenance; of the Cartesian-Lockean-Humean-Kantian paradigm, of foundationalisms (in practice, fideistic foundationalisms) and irrationalisms (in practice, capricious exercises of the will-to-power or some other ideologically and/or psycho-somatically buried source) new and old alike; of the primordial failing of western philosophy, ontological monovalence, and its close ally, the epistemic fallacy with its ontic dual; of the analytic problematic laid down by Plato, which Hegel served only to replicate in his actualist monovalent analytic reinstatement in transfigurative reconciling dialectical connection, while in his hubristic claims for absolute idealism he inaugurated the Comtean, Kierkegaardian and Nietzschean eclipses of reason, replicating the fundamentals of positivism through its transmutation route to the superidealism of a Baudrillard.'

(Roy Bhaskar (1994) *Plato etc: The Problems of Philosophy and Their Resolution*

London: Verso.)

2. It is widely accepted that the world's climate is changing which results in significant alterations of regional weather and climate conditions (e.g. IPCC 2001, 2007), the potential for climate-change induced increase of atmospheric hazards has been recognised by the insurance industry for some time, e.g. Berz (1993), Changnon et al, (1997).

(Schwierz, C., Köllner-Heck, P., Mutter, E. Z., Bresch, D. N., Vidale, P., Wild, M., Schär, C. 2010 'Modelling European winter wind storm losses in current and future climate', *Climate Change* 101: 485-514)

3. Trachtenberg does just that with the first six images in *American Photographs*, explaining how the successive references to cameras and photographs and situations of photographing lead viewers to conclude, if their reading similarities and differences coincides with Trachtenberg's, that the sequence is about photography and image making.

(Becker, H. 2007 *Telling About Society*, Chicago: Chicago University Press).

Are these good or bad sentences? What makes them good or bad?

Tips for editing sentences:

Standard English has so many rules that keeping them all in mind is difficult. As such, try using the following for guidelines as principles which help you to drill down into detail. While editing also have some good reference materials at hand; I'd recommend Bill Bryson's *Troublesome Words* and Oxford University Press's *New Hart's Rules: The Handbook of Style for Writers and Editors*.

Tip 1: The three line guideline – A political scientist friend of mine once told me he used a ‘three line rule’ when writing. This meant that whenever he was composing his work, if a sentence went over three lines he would stop and ask himself whether this was in fact two sentences. I think this is pretty good advice, not a rule but a *guideline* to prevent large unwieldy sentences. The trick is not to be a slave to the ‘rule’: some sentences over three lines will work. If you know how to use commas, colons and semi colons effectively then you can generate well crafted, intelligible, long sentences.

Tip 2: Don’t be too verbose (get it?) – Long sentences are often the result of unnecessary words. But ‘unnecessary’ does not mean too many words. Howard Becker, the esteemed American sociologist, has written a lot about writing, and he has the following advice about how to deal with unnecessary wordiness:

An unnecessary word does not work. It doesn’t further an argument, state an important qualification, or add a compelling detail. (See?) I find unnecessary words by a simple test. As I read through my draft, I check each word and phrase to see what happens if I remove it. If the meaning does not change, I take it out. The deletion often makes me see what I really wanted there, and I put it in. I seldom take unnecessary words out of early drafts. I’ll see them when I rewrite and either replace them with working words or cut them.

(Becker, H. (1986) *Writing for Social Scientists*. p.81)

Strunk and White’s famous aphorism is ‘Omit needless words’. Often this can be taken to mean cut to the bone, but the key word is ‘needless’. Most obviously this means get rid of repetitions, which often pepper first drafts; however, ‘needless’ means more than that. Sometimes words or phrases aren’t repetitions but they are embellishment adding too much

information. In short, have every word working for you; have every word driving toward you making your point in the best possible way.

Tip 3: Watch out for relative/subordinate clauses – nearly every style guide will tell you that writing in the active voice is an important feature of ‘good’ style and clear writing. However, academic writing, particularly in the UK, often has passive sentences, where the subject comes at the end. Compare the following three sentences, one active, one passive and one passive elided:

[Active] Bernard and Peabody experimented on viral organisms.

[Passive] Viral organisms were experimented on by Bernard and Peabody.

[Passive elided] Viral organisms were experimented on.

All of these sentences are acceptable constructions. The important thing is whether a reader can follow who is doing what to whom in the sentence, whether it is passive or active. Disciplinary conventions are important, some will use more passive constructions than others, but I would say it is modifying clauses which can cause problems. Modifying clauses add detail to the main clause – the main clause being the core of the sentence which cannot be deleted. Detail is obviously an essential thing in academic writing so it is always a balancing act in not providing too little detail, leaving your reader short, and going too far and putting an excess of information in a sentence, and thus making it difficult for your readers to follow you.

Tip 4: Eliminate Your Writer’s Tics – every writer has them but they are different for each of us. Writer’s tics are patterns and repetition you fall into. Sometimes they are a word you repeat over and over when alternatives or rephrasing are available. Sometimes it is the miss

use connecting words such as ‘however’ or ‘therefore’, which could be deleted. And sometimes it is the pattern of a paragraph or whole sections, in which you follow a set pattern. Editing these is often a question of style, not necessarily because the use is ungrammatical. An important point to note is not to worry too much about your tics in first drafts. First drafts are about getting the ideas down and flow and creativity are the things you want to give the best chance to flourish. By focusing in too much on small mistakes or clumsy style choices a writer can run the risk of slipping into procrastination. The answer is to note them but leave them be: they aren’t going anywhere. Come back to your tics in a later draft where you can concentrate purely on minor errors.

Paragraph structure:

Stephen King, in his book *On Writing: a memoir of the craft* (2001: 103), notes that ‘the paragraph, not the sentence, is the basic unit of writing’. There are some useful pointers to be understood to aid both the clarity of the point being made in the paragraph as well as helping the structure of your argument. The following exercise may help to illustrate.

Exercise: Building a paragraph

In small groups, put the paragraph back together, trying to arrange the fragments in the right order. What in the text informs your decisions? What features of the text help the paragraph cohere and be cohesive? Consider what features of the text signal text structure and/or the paragraph’s main point. How is the paragraph linked to other parts of the text, linking forward (cataphoric), backward (anaphoric), and externally (exophoric)? Here’s a short essay I put together for a popular science website on writing better paragraphs: http://climatesnack.com/daniel_soule/

Generic paragraph structure

1. Main point/topic sentence – this should be linked to, or contrast with the last sentence of the previous paragraph
2. [Elaborate on the main point]
3. Examples and illustration of your point
4. Come full circle to say how your example(s) illustrates your main point
5. [Signal next paragraph]

Writing paragraphs tips:

Tip 1. Make sure the start of your paragraphs begin with a strong topic sentence, i.e. a sentence whose overarching function is to provide the point, issue or theme which the other sentences in the paragraph explore in greater detail. Editing is important because you don't always start your paragraphs with good topic sentences in the first draft. This is because you are creating and playing with an idea for the first time. Sometimes the topic sentence is halfway down or at the end, or you have two sentences functioning as a topic sentence, essentially saying the same thing in two different ways. Therefore during editing you want to make sure each paragraph's topic sentence is strong, at the start and you've eliminated repetition. A good test is to see if you can get the gist of your chapter/paper by just reading the topic sentences, allowing you to see if one idea flows to the next and whether the overall structure of your piece works.

Tip 2. Try to write topic sentences as writing prompts when planning a piece. As topic sentences indicate the ideas and topics you want to discuss, you may have some conception of what they may be before you start, i.e. you may have a list of bullet points or key words you

want to talk about. The trick is to try and turn these into topic sentences and think about the order in which you want to present them, mapping how one idea moves to the next. In this way you can create a good set of prompts to think around, generating to complete the rest of the paragraph. This is only an approach to help get ideas and words on the page. Don't feel constrained by early plans and drafts – once it is on the paper decide if you want to change it, subtracting, adding to or rearranging as necessary.

Exercise 3: How do we talk about the literature?

In your groups and using the descriptions above, identify the different referencing strategies, matching an extract of text to a referencing strategy. There is more than one example in a few cases and some are combinations of referencing strategies.

Exercise: Academic voice

When making claims about and critiquing literature novice writers can be over zealous and harsh in their criticism and need to modulate how they appraise the work of others. Similarly, they can be too enthusiastic about favoured areas and thinkers and need to attune the appropriateness of their evaluations to the dispassionate scholarly style. A third problem in the language used to refer to published work is that of 'hedging': being too tentative with evaluation of the literature. Below are some fictional examples. Can you identify what is wrong with them and then rewrite them to eliminate the problem?

'Smotley (1997) has completely overestimated the value of economic variables in political decision making.'

--

‘The theories propagated by Bruce (1985) and Wallace (2001) concerning Mary Queen of Scots are baseless and unjustified.’

--

‘Thirkill (2001) presents a truly captivating account of mucus extraction from the nasal passages of the South African cork tree grub.’

--

‘Doyle’s (2004) problem could possibly be considered a product of his epistemology.’

--

Part III: Planning, outlining and structure

A major problem any thesis writer faces is the fact that a thesis is usually not written in the order it finally appears. Also it is usually the first thesis someone has written. Discovering and managing the changing structure of such a large document is very challenging indeed. It is in the second year of researching for a PhD that larger structural issues tend to arise. This is because you start to do your analysis and think about how to separate out elements into meaningful units of description. Then you think about how these different bits will relate together and with other bits of thinking and writing you have done, such as literature reviews or methodologies. And then, perhaps most difficult, is thinking about how what you have done may fit with things you have not yet finished and written up.

This section introduces two essential activities for managing your ever-changing thesis. The first is to consider the general structure of a thesis: what are the constituent elements; what order are they in; are alternative structures available to you? The second is a writing exercise facilitate project managing your writing, as well as summarising your thesis in miniature, in order to trouble-shoot editorial problems.

Exercise 1: Generic thesis structure

In your groups, can you decide on and build a generic structure for a thesis with the resources provided? Fragments with block capitals represent possible main rhetorical headings and functions of a thesis. Fragments in lower-case are possible lower level rhetorical functions you would expect the thesis to address.

Exercise 2: Creating a thesis outline

In this exercise we will work at developing a thesis outline. It is difficult to hold your whole argument in your head and to see how it flows and works as a linear document. Also, theses are not written in the order of appearance: the first chapter you write may be the fifth in the final document. As such, this exercise enables you to manage the order and coherence of your argument.

The exercise is also a project management tool, enabling you to see how much of your thesis is finished and how much is left to be done. Time should also be a factor: once you know how much is done you can estimate how much is left to do and in what timeframe. Appreciating the limitations of time is essential to enable you to plan realistic and well designed writing goals.

Earlier on in your thesis, when only a few bits of work have been drafted, this exercise can be quite difficult but it will help you reflect on the breadth and scope of a thesis and how you can map your research project onto a complex written document. In third year this exercise has more of an editorial function and can help you troubleshoot problems such as the structure of the argument, the need for more information in a chapter, or less detail in some cases, and discuss it with your supervisory team.

Fill in the following form, summarising each chapter into an abstract. Estimate the total word count per chapter, making sure the final total is within the minimum and maximum word limit. Write in full sentences so that the outline can stand alone as a comprehensible piece of writing – i.e. someone in your field but, without personal knowledge of your project, should be able to read and understand it (bullet points will not achieve this). For each chapter think how every section adds to the chapter's structure and argument; and how each chapter contributes to your overall thesis structure and argument

Thesis title:

Total word count (excluding appendices) =

Total word count (including appendices) =

Date for complete first draft:

Date of submission:

Number of chapters finished or in a complete first draft:

Number of words:

Number of chapters left to be written:

Number of words:

Thesis Abstract: (Short synopsis of the aims, scope, argument and approach of the thesis)

What is the thesis about? (1-2 paragraphs)

What are the main themes and objectives? (1-2 paragraphs)

What does it do differently, more innovatively, or better than existing books? (1-2 paragraphs)

Chapter 1 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 2 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 3 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 4 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 5 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 6 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 7 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 8 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 9 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Chapter 10 title:

Complete: Yes / No

Date for first draft:

Word count=

Chapter abstract + subheadings:

Part IV: Introductions and Conclusions

From Beginning to End

This section of the workshop takes on the purposes and demands of writing introductions and conclusions. This includes writing introductory and concluding chapters, as well as considering how to introduce and conclude individual chapters throughout your thesis. We will look specifically at how to structure introductions and conclusions

Following the approach used in the previous workshops when contemplating planning writing, we will try to define the structure of introductions and conclusions in relation to their rhetorical purpose(s), which may then be used as a template to help generate writing.

Introductions:

Exercise: Research Article Jigsaw Puzzle – Put the 3 paragraphs of the introduction from this research paper back into their original published order. What is your reasoning behind your decisions?

Now we'll look at a model structure for research articles. This is called the CARS model, or Creating a Research Space, from John Swale's (1990) research *Genre Analysis*. A research paper is clearly not a thesis and it obviously differs in certain respects – though, importantly, there are features common to all. However, there are a few good reasons for taking a closer look. As academics, we all read a lot of research papers and for many of you your PhDs will form the basis of your initial forays into publishing in scholarly journals. These articles are, therefore, very familiar to us, and they are also short and easier to deal with. Therefore, we'll explore this model before considering its efficacy to thesis writing.

Introductions for Research Articles

According to Swales introductions can be seen as performing at least 3 main rhetorical functions within the context of communicating purposefully with a particular community of peers:

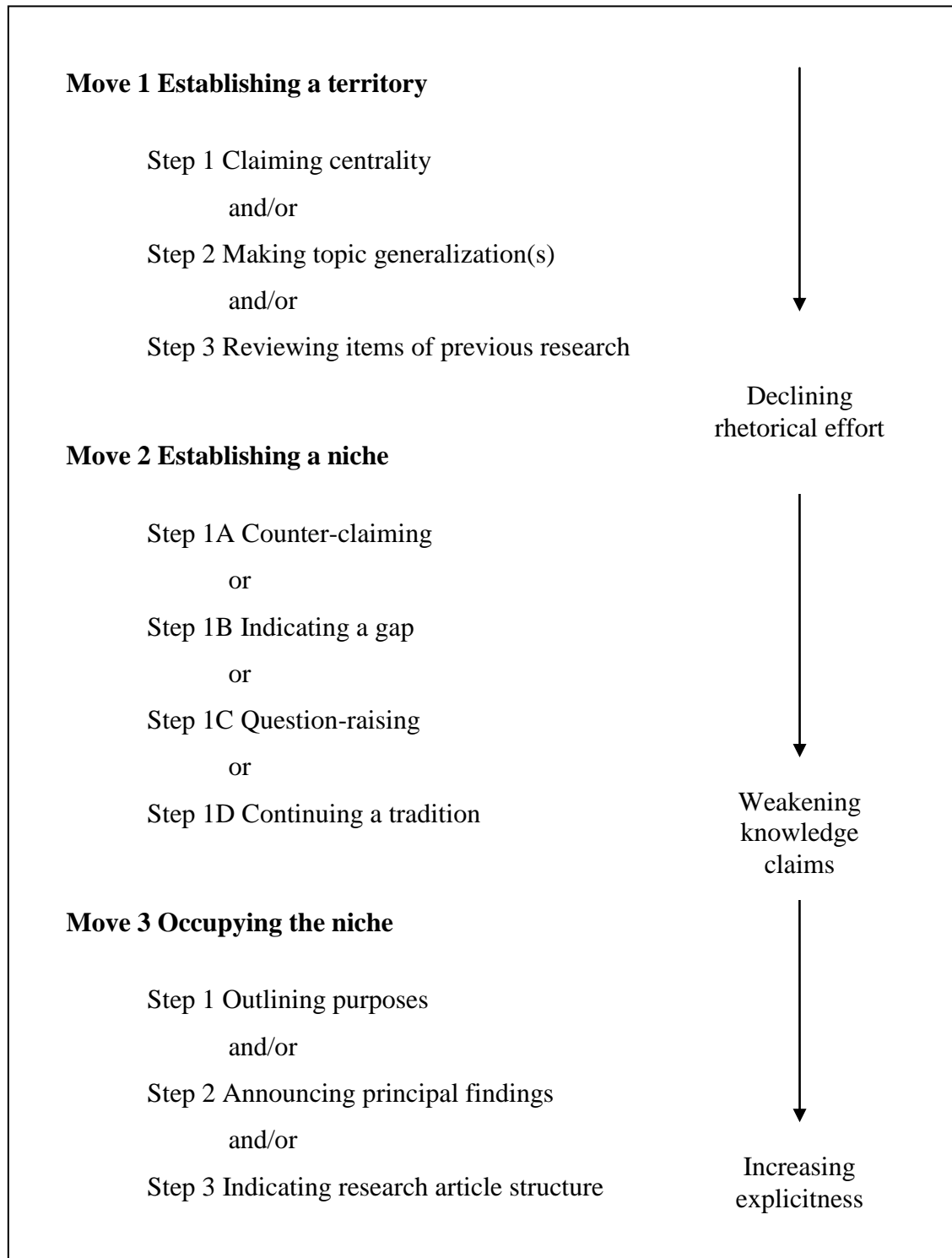
1. To re-state or re-establish the importance of the research community and its work. Stating why its work is important or worthwhile.
2. To create discursively a position for the research article to fit into.
3. To illustrate how this position will be achieved and defended, i.e. signposting your argument and the structure it will take.

Swales' model below illustrates the various ways in which the three rhetorical functions above can be achieved in introductions to research articles. He also says the model should be used:

not so much as rigid templates against which all texts are forced to fit, but more as *caricatures* which self-evidently simplify and distort certain features in an attempt to capture general identity. (1990: 213)

He argues that introductions, particularly in science and social science research articles, create a rhetorical space for the research being presented. The discursive moves and steps represent the rhetorical functions of statements made in introductions. Note that while each move is to be taken as obligatory, only one of the steps in each move need be used for the move to have been utilised.

Creating a Research Space (CARS) Model



A CARS model for article introductions (Swales, 1990: 141)

A key thing to remember is that both moves one and two are established with reference to the literature. Below, some extra detail on the nature of the moves is described.

Statements that establish territory (Move 1):

Claiming centrality

‘Rehabilitation from lower back pain is important because of the significant pain endured by the afflicted (Sims, 2004), as well as for costs borne by the economy as a whole (Smith and Jones, 2009).’

There is an explicit reference to the centrality of the subject by the use of ‘is important’. Therefore, the statement serves the function of situating the research article within a topic of interest to a journal, for example the *Journal of Health Care Economics*.

Making topic generalisations

‘One hundred and fifty thousand people per year suffer from lower back pain in Scotland (Smith and Jones, 2009).’

In this example there is no explicit reference to how significant this statement is, but let’s assume that the readers of, say, the esteemed *Journal of Lower Back Pain* know that for the population size of Scotland this is a large and significant number. Therefore the paper is more implicitly situated, with reference to the shared knowledge of the audience, within an important or relevant topic.

Reviewing items of previous research

This step explicitly relates items of previous research with those who did the research. In this step Swales asserts ‘the author needs to provide a *specification*... of previous findings, an *attribution* to the research workers who published those results, and a *stance* towards the findings themselves’ (1990: 148))

‘Smith and Jones (2009) have illustrated the high instance of lower back pain in the Scottish population.’

There is an explicit citation of a specific piece of research, with the names of the authors or their work included in the sentence (remember, what is in parenthesis or a footnote/endnote is technically not in the sentence). We might assume, as expert readers of this particular journal, that Smith and Jones’ study is an important or significant one in relation to the topic (why else mention it?) and that it is in some way relevant to the issue or question which the paper will go on to discuss. Therefore, this initial sentence would generate a number of implicit

expectations, at least some of which I would expect to be fulfilled. For example, I would expect that the paper is in some way going to explore an issue about Scotland and its high instance of lower back pain, or perhaps some further detail about this large cohort.

Statements that establish the niche (Move 2): This move is where the author creates a space for their research by indicating what type of gap exists. This move must logically follow on from the previous move. Look out for words or phrases which indicate a changing direction in the argument, for example ‘however’, ‘alternatively’, ‘contrary to...’, ‘despite’, and many others besides. These words are a good indication that a gap is being discursively created because they are claiming a deficiency in what is known in the literature. However, sometimes a gap can be created implicitly, without reference to the aforementioned argumentative words. For example, merely writing ‘Little is known about...’ or ‘Significant change has occurred in the past twenty years’ may be enough, without the use of an ‘however’, to discursively signal a gap to an audience of expert readers.

Counter-claiming

This step claims or suggests that existing theories, approaches, methodologies or paradigms are not completely adequate.

‘However, contrary to Smith and Jones’ (2009) assertion, preliminary data presented by Bloggs (2008) suggests a need to rethink previously well excepted hypotheses linking economic factors to higher levels of lower-back pain.’

Indicating a gap

This step makes assertions that there is an area of relevance to the research subject which is under-researched or has been overlooked, for whatever reason, or that new techniques/technologies etc... have opened up a previously untouched area. A classic example might be:

‘The breakthrough modelling of the double helix structure of DNA (Watson and Crick, 1953) opens up the possibility of mapping the characteristics of specific genes.’

Sticking with our health based example:

‘Now that a clear link between lower-back pain and socio-economic class has been established (Smith and Jones, 2009; Jones, Smith and Pimkins, 2010) further work is needed to adequately detail the relationship’.

Question raising

These are statements indicating limitations and questions that arise from previous research.

‘Though the extent of lower-back pain within the Scottish population is well documented (Smith and Jones, 2009) and that a socio-economic imbalance exists in the afflicted cohort (Jones, Smith and Pimkins, 2010), why the imbalance exists still requires explanation.’

Continuing a tradition

This is the type of work that applies previous models or methods in a similar way to previous research, perhaps to bigger or slightly different data.

‘These existing models (Smith and Jones, 2009; Jones, Smith and Pimkins, 2010) could be extended to a larger sample size to provide further specification to the link between socio-economic class and the prevalence of lower-back pain in the Scottish population.’

One additional thing to note about these four different gaps is that, as indicated on the diagram above, ‘counter claiming’ is harder to do but has a greater pay-off than ‘continuing a tradition’. The reasons for this are partly social. Peer reviewers are researchers in the field and come with a set of sometimes conflicting interests. On the one hand they have a vested interest in this or that method, paradigm or point of view, so if your work is ‘counter claiming’ against the dominant view or just the view of the particular peer-reviewers you happened to get then your paper, naturally, would face a more difficult task. That is to say ‘continuing a tradition’ is less challenging both socially and intellectually to peer-reviewers because it is following an already accepted line of enquiry. On the other hand, research is defined by whether something is new and original. Inherent in being new and original is being different and, therefore, challenging what has come before. As such ‘continuing a tradition’ is less new and original than ‘counter claiming’, ‘indicating a gap’ or ‘question raising’. This means that while a ‘continuing a tradition’ gap may still offer something new its newness is less significant than the other three (“some things are more original than others.”) It would, therefore, probably be a good idea for you to think about what type of contribution your piece of research is making.

Statements occupying the niche (Move 3): this move has a meta-discursive function, meaning that this move is signposting the content and form of your argument, rather than

consisting of the content of the argument itself. But this move must follow logically from the moves that have gone before.

Outlining purposes

This step forecasts the goal your study had: to explore a relationship between two variables, to uncover new data in explanation of a phenomenon, to conduct qualitative interviews to give a voice to previously unheard opinions, etc...

‘This paper, therefore, will explore further the relationship between lower-back pain and socio-economic variables by subdividing those variables in greater detail to delimit the effects (if any) of gender, marital-status, age, geographic location, profession, and life-style choices.’

Announcing principal findings

This is like a tease to your audience, hinting at what they will find.

‘In our study we have found a significant relationship between lower-back pain and only three of socio-economic variables we tested for: gender; profession and, age.’

The key phrase is ‘found a significant relationship’, which tells the reader something about the nature of the results, without actually detailing the findings.

Indicating research article structure

‘The research article is structured as follows: firstly, we summarise the background literature in greater detail; secondly, the survey method used is outlined; thirdly, results and then analysis are displayed; and lastly the paper discusses the implications of the findings.’

Of the first two of these three moves only one or the other is likely to be used, the last one indicating the structure is often used in combination with either of the other two.

Exercise:

Using the model above and the research paper you have brought along identify the moves and steps in the introduction.

1. Are all the moves used?
2. Which steps are employed in achieving each move?
3. Would this model work for your thesis chapters?

Exercise: Introductions to thesis chapters

Now look at the introduction from this example thesis chapter. Does the CARS model apply here? Are there any additional things happening in this introduction which the model does pick up?

Chapter 2

Genericity of Control

This chapter describes the problem of generic nonlinear control and discusses approaches to its solution in the context of artificial networks [95]. The issue of the representation of nonlinear dynamics in a generic, parametric form is addressed. The notion of *differential approximation* is introduced and identified as the key problem in this context.

2.1 Introduction

The problems of the advanced technology of the 1950s went beyond the standard mathematical background of the engineers. The aid of prominent mathematicians such as R. Bellman, S. Lefschetz, J. P. LaSalle, L. S. Pontryagin, N. N. Krasovskii, and F. R. Gantmacher provided valuable aid and helped some researchers, most notably R. E. Kalman, to realise the need for a firm basis of control theory [38]. The conclusion was that, without disregarding the physical realities, feedback techniques should be considered in a framework of a general, mathematical theory, which will logically unify and develop them via an interplay of theory and practice. However, as pointed out in [38], the general properties of control systems can often be discovered only by abstract analysis guided by intuition gained from engineering experience. This is to say that control problems of fundamental nature should be precisely and consistently defined in mathematical terms.

In this context we attempt to give a formulation of a problem, perceived as central to nonlinear control, viz. the ability to devise generic, parametric models of nonlinear systems, which are amenable to a tractable design. This is motivated by the maturity of this approach for linear control and by recent results in artificial neural networks (ANN).

The chapter is organised as follows. Section 2.2 defines the basic terminology and, above all, the concept of generic control. Section 2.3 explains the genericity of linear control preparing the material for comparison with the problems described in Section 2.4 on nonlinear control. This gives a background to the neural network approaches to the genericity of nonlinear case, elaborated in Section 2.5. Finally, Section 2.6 introduces the notion of differential approximation as a generalisation of dynamic, parametric approach to generic nonlinear control.

Only deterministic time-invariant systems are discussed.

[Zbikowski, R. W. (1994) *Recurrent Neural Networks: Some Control Aspects*. University of Glasgow
PhD Thesis]

Thesis introductions:

Summary of Introduction's Functions:

The following four functional moves and subsidiary steps are a summary of the possible rhetorical strategies you might use in the introductory section of a chapter. They are, however, not all necessary and sufficient. Some may not be utilised in certain chapters. For example, if your literature review is a discrete chapter, then you may not need to use 1 and 2. I would suggest that 4 is important regardless of the chapter.

1. Establish a territory in discussing the literature to support your argument by
 - Claiming centrality
 - Making topic generalisation(s)
 - Reviewing items of previous research
2. Establish a niche for your research by
 - Counter claiming
 - Indicating a gap
 - Question-raising
 - Continuing a tradition
3. Occupy the niche by
 - Detailing the main points of the chapter
 - Outline/define the purpose(s), including setting limits, of the chapter
 - Announcing principal finding
 - Indicating structure of the chapter/define the contents of the chapter
4. Create argumentative links
 - Linking back to previous chapters/themes/theories/points
 - Indicate the chapters status/role in the overall argument
 - Forecast forthcoming sections
 - Indicate how your argument will develop

A model conclusion:

Based on a structural analysis of PhD conclusions, Swales (2004: 117) notes four rhetorical functions of a conclusion:

1. Introductory Restatement
2. Consolidation of Present Research (with recycling)
3. Practical Applications/Implications
4. Recommendations for Future Research

You may have to do all or some of these depending on your discipline. Make sure you are familiar with the conventions of your discipline.

Exercise:

Analyse the two conclusions of chapters below from the same PhD, using the above rhetorical moves. Which moves do the conclusions utilise? If some are not employed, why might that be? Are there any other important things which the chapter conclusions are doing?

The shorter conclusion under the heading ‘Quantitative data analyses’ is from chapter 2, the methods chapter. While the second and longer conclusion, ‘The floor to E: Relationships between dance events and drug use’, is from chapter 5.

Conclusion e.g. 1:

Quantitative data analyses

A coding frame was constructed from the answers (which were already not pre-coded) on the questionnaire. Numerical answers were coded as continuous variables with provision for missing data, don't know answers, refusals and mean substitutions, where appropriate. Verbal open-ended answers were reduced into categorical variables. All data were coded and entered directly from the questionnaire on to a PC computer spreadsheet. All statistical analyses were conducted using the SPSS for WindowsTM package (Nie et al, 1983). This package was also used to clean and logically validate the data before quantitative analyses were begun. Methods of data analysis included descriptive statistics (e.g. frequencies) uni-variant inferential statistics (e.g. *t*-tests) and multi-variant techniques (e.g. regression). Coding, data entry, cleaning and analyses were conducted by the author alone. The following five chapters will describe the results produced by these analyses.

[Forsyth, A. J. M. (1997) *A Quantitative Exploration of Dance Drug Use: The New Pattern of Drug Use of the 1990s*. University of Glasgow PhD Thesis]

Conclusion e.g. 2:

The floor to E: Relationships between dance events and drug use

Chapter 3 indicated that these respondents were poly-drug users. This chapter has showed that different drugs were used in different settings. Some drugs were more likely to be taken at dance events than others. Often more than one drug was used at different times throughout a night's raving. As such, dance drug users could perhaps be better described as 'poly-setting drug users'.

- Amphetamine, nitrites and especially ecstasy were the primary dance drugs. Other drugs such as LSD and cocaine were also used as dance drugs. Even drugs not used to assist dancing, such as temazepam, were used during a night's raving by many respondents.
- The frequencies of use of drugs classified as non-dance drugs were closely related to each other, but not to those classified as dance drugs. Dance drugs were also related to each other and increased use of ecstasy, the archetypal dance drug, was best predicted by increased frequency of night-club attendance (the mainstay of dance event attendance in this sample, as indicated in Chapter 4).
- Ecstasy also differed from other dance drugs in that its first use tended to occur at the same time as initiation into the dance scene for many users. Other drugs, notably temazepam, tended to be used by respondents after dance events, both in terms of first attendance and literally during a night out.

These findings imply that certain forms of drug use are related to the advent of dance drug (rave) culture. This inevitably leads to the question of whether or not this is because of a high level of drug availability at dance events. The possibility that dance/rave events are conduits for increased drug supply will be explored in the next chapter.

[Forsyth, A. J. M. (1997) *A Quantitative Exploration of Dance Drug Use: The New Pattern of Drug Use of the 1990s*. University of Glasgow PhD Thesis]

You may have to do all or some of Swales' moves depending on your discipline. Make sure you are familiar with the conventions of your discipline. Also, if the conclusion is the conclusion to the whole thesis consider whether you should also:

- Make a clear statement of your contribution
- State to what extent you achieved the aims of your study

The final chapter:

We now consider how to write the ending of your thesis. Again, we can refer to Murray for a summary of the importance and purpose of this chapter:

'This [the concluding chapter] is where you have to make the case for the sufficiency of your research as a 'contribution' to knowledge, or in some other sense... foreground your own work, by putting it first, then contextualize your work, making it explicit how you have added to the field, by mentioning links with and distinctions from the published work of others. [You do not] need to provide additional commentary on or critique of the literature... All that is needed in your

conclusion is a clear statement of how your work relates to that of others.’ (2006: 198-199).

Some stylistic issues:

- Write in the past tense about the work you have done
- Don’t go beyond what you have evidence by overstating or over-generalizing your contribution
- Match your aim with your claim: discuss to what extent you have achieved what you set out to

Swales also provides some relevant, and cautionary, writer centred advice:

More than anything else, [PhD writers] are long-distance runners making a final spurt for the tape, typically with very few emotional and intellectual resources left as they try to finish by the deadline negotiated by them, their advisors, and their examiners. In this context, it is not at all surprising that the final concluding chapter is often the weakest of all, often being little more than a tame summary of the main findings.... Little may be offered that is new and... little may be *resituated* in terms of consolidations, implications, regrets, applications and recommendations... the candidate, having spent months or even years plugging away at his or her “stuff,” may not easily be in a position – because of expiry of creative energy and shortage of time – to offer some kind of re-visioning in the final pages (a “higher and broader pass” over the preceding material), or to think out or work through anything other than the more obvious and straightforward of implications and applications. (2004: 118)

The message, therefore, is be aware of this, try and plan for it, and leave something in reserve for the conclusion. Attack the conclusion as you have attacked the rest of your thesis: with intellectual vigour and good planning.

Part V: How to Write Methodologies

“The Methods section describes, in various degrees of detail, methodology, materials (or subjects), and procedures. This is the narrowest part of the [research paper].”

(Swales and Feak (2004) *Academic Writing for Graduate Students: Essential Tasks and Skills*. 2nd edition. Ann Arbor: University of Michigan Press. p222.)

Methods sections are often felt by authors to be the easiest section to write up and they are often the first section to be tackled. That said it is useful to reflect on what type of methods section is deployed in your discipline and in the types of journals you are likely to write for. Methods section, while often being the most conservative of sections, still display variation, they also exhibit different linguistics and structural features from other sections of the research paper, as the following two tables illustrate.

Frequencies of Selected Features in Research Paper Sections				
	Introduction	Methods	Results	Discussion
Present tense	High	Low	Low	High
Past tense	Mid	High	High	Mid
Passive voice	Low	High	Variable	Variable
Citations	High	Low	Variable	High
Qualifications	Mid	Low	Mid	High
Commentary	High	Low	Variable	High

(From Swales and Feak 2004, p223)

Variation in Methods Sections	
Condensed Abstract Style	Extended Abstract Style
Assumes background knowledge	Sees need to provide background
Avoids named subsections	Several named subsections
Uses acronyms and citations as shorthand	Uses descriptions
Running series of verbs (e.g. ‘collected’, ‘sorted’, and ‘stored’)	Usually one finite verb per clause
Few “by + verb-ing” “how” statements	A number of “how” statements
Few definitions and examples	More definitions and examples
Few justifications	Several justifications (often initial purpose clauses)
Few linking phrases	Wide range of linking phrases

(From Swales and Feak 2004, p227)

What type of methods sections are used in your example research papers, condensed or extended?

From the above two tables what textual features do your methods display?

Part VI: Writing about Evidence & Data

Data is any of the material you have processed and analysed in the course of your study

Types of data:

- Tables
- Research note books
- Interview transcriptions
- Media texts
- Pictures – photographs, drawings, diagrams etc...
- Field notes
- Graphical data – pie charts, graphs, scatter plots etc...

Other Pragmatic Issues:

1. You will collect and analyse more than you can use
2. There will be themes/issues/findings (?) you want to write about. Spend some time planning how you want to break them up, or relate them to each other before your start. Brainstorms and/or outlines are good for this.
3. There are always too many themes/issues/findings that you can write about in one piece of writing, i.e. a single chapter or a journal article.
4. You will have to choose *representative exemplars*
5. What are exemplars? Usable chunks of data

Extract Design and Presentation:

1. *Keeping extracts to a manageable size.* Make them work for you. If they are quite large, decide whether they can be split up so you can discuss smaller extracts to maintain its readability. Keep in mind the idea of a ‘usable nugget’.
2. *Ask yourself whether an exemplar is necessary?* The data should be helping your argument; there is always more data than you need, so make it work for you and prior to writing choose how many you need and which best make your case.
3. *Repurpose raw data into usable extracts.* Interviews are transcribed into a particular format, a diagram might be used to represent an institutions structure and process, or content might be themed. This means they need to be in a format that is both possible to discuss in written form, and acceptable to your audience.
4. *How many pieces of data do you need?* This might seem like a funny way of looking at it but decide this before you start writing. Think, ‘how many examples can a

chapter of x number of words take. For example, an 8,000 word chapter we will look at, from a 60,000> data set, displays only 9 extracts, totalling 1,473 words.

5. *What does your argument look like?* Spend time before you start writing and ask in what order your pieces of data should be presented. This way you can also use them as a plan, and make decisions about the structure and style of your paper/chapter
6. *How much data can you present?* This is probably the most important point for you as a writer because you can use it to take control of your data set. The fact is a text is only of finite length, therefore, you only have a limited amount of space to work with. Once you realise you can only present certain amount of data you can go to your data set and chose the number of exemplars. Each extract must support a finding or distinction. Extracts/data support points of your argument, there should be a direct relationship between the two. In terms of writing, it is typical to state the finding or distinction first and then present an exemplar in support.
7. *Signpost, display and comment on your data.* Don't just plonk your data in front of your reader, signpost it or implicitly signal it and then display it, and then comment on it. Data does sit independently of your argument, it must be woven into it seamlessly. Don't assume your data has explanatory power purely independent of you describing it.
8. *Take your reader through complicated data.* Think about whether or not you need to take your reader through a lengthy extract, a conversational interaction, or a table in the paragraph prior or subsequent to it. This especially goes for lengthy pieces of text or moderately complicated pictorial representations such as tables or graphs. You might need to explain how they are presenting information.

Structure for presenting data in your text:

This is a good template to follow when integrating data with your own prose, describing and discussing your data. Also, it is simple to follow.

Prototype structure:

1. Analysis Section Heading
2. Present the Distinction or Finding
3. Introduce the First Data Exemplar of this Distinction
4. Display the First Data Exemplar of this Distinction
5. Comment Further on the First Data Exemplar of this Distinction
6. Make Transition to Second Data Exemplar of this Distinction

7. Display the Second Data Exemplar of this Distinction
8. Comment Further on the Second Data Exemplar of this Distinction
9. Make Transition to the Next Data Exemplar of this Distinction and Repeat the Pattern
Until the Closing of this Section

Chenail, R. J., (1995). 'Presenting Qualitative Data'. *The Qualitative Report*, 2 (3), Nova Southeastern University, (<http://www.nova.edu/ssss/QR/QR2-3/presenting.html>).

Part VII: Notes on Editing

Writing is a very complex process, full of tangents and false starts and blockages. In this workshop we have covered the details of academic style and you might replicate those features in your own writing, and have looked at how to generate writing around your research project. This is all preparatory work; at some point this year you will have to translate into a comprehensive, purposeful document or documents: a differentiation report or a literature review for your supervisors. Editing is the key to the process of producing professional, polished prose, and understanding the different functions of composition and editing that go into producing a complex piece of writing can help you navigate safely the complexity of the writing process. Below is a set-by-set guide to composition and editing. Writers can often get in a tangle because they are trying to do too many things at once when writing: they try to both compose a piece while they are still planning and sorting the preparatory material; they try to articulate new ideas while trying to reconfigure the minutia of the previous idea; and they try to look at a piece both broadly in its structure whilst trying to refine the detail of its grammar or typographical errors. The result is that the process is befuddled and none of these tasks are performed to the best of the writer's ability.

Phase 1: Private writing – This is not the time to share your ideas, though supervisors might like to feed into your brain storms, but when you sit down to write these up give yourself space and time to get it down as best you can. Once you have got the ideas down and then worked on them to a sufficient level then it is time to let supervisors or co-authors back into the process. It is also during the editing process that you practice and refine the details of style, i.e. perfect process does not just appear on the page, it is worked on and grafted at.

Stage 1: Preparation - Planning and outlining. All writing starts with at least some preparation. This is the time to collect your material together (papers, results, tables, extracts

etc...) and put them into some meaningful relationship. Some people like to brainstorm or writer out a plan. There is no one right way; it is a case of whatever works for you is the right way. I recommend you write some form of plan, perhaps do some preparatory writing in your note books or in the type of writing tasks we have looked at above. For me I like to start with a rough word target and then work backwards to define the length and estimated content/subjects/topics of each section. This then give me a map to follow and targets to aim at. If I over write that is okay but having a target enables me to give a purposeful form to my argument, rather than it being more of a stream of consciousness. Targets also enable me to follow a timetable and have something achievable to aim at.

Stage 2: 1st Draft – Creativity. The first phase is the full, rough, unpolished draft. I write the chapter or paper until I have a complete piece with a beginning, an end and all the meat and potatoes in between. As I said this is a ‘rough’ draft and it is usually baggy and requires refining and cutting down.

Stage 3: 2nd Draft – Content and structure edit. A good piece of advice is that a second draft should be the first draft minus 10 per cent. After the first draft, ideally, I would take a break from the piece. Then I return to make my second draft: the content draft. I call it ‘the content draft’ because I’m mainly focusing on the structure and presentation of the argument, so I’m looking for repetitious paragraphs and sentences, and I cut, combine or reformulate. I ask myself if the structure needs tweaking, bits moved around or possibly added to for clarification. I also check I have strong topic sentences at the start of my paragraphs and that my links, either explicit or implicit, work well. During this process the piece tightens up a lot but it is not yet ready to be publicly aired.

Stage 4: 3rd Draft – Copyedit. My last draft in the personal phases is a copy edit. The copy edit is all about the detail. To the best of my ability, I take the text line-by-line and word-by-

word trying to spot typos (you'll never catch them all but it is your duty of try). This draft also means cutting out unnecessary words but unnecessary doesn't just mean cut for the sake of cutting. I'm asking myself whether every word is working for me. Adjectives and adverbs are very often the victims of this draft and are ruthlessly dispensed with. One other important thing I'm looking for are my 'writer's ticks'. Writer's ticks are those annoying little patterns you fall into, like always using 'as such' instead of varying it (this was one of my ticks as PhD student – I have others now). Are you an 'indeed' or an 'interestingly' person, or perhaps you abuse 'clearly' or 'however'? These are common ones but there are many others. It is not that these words are wrong but they are often over used, as well as misused. Once I've eliminated as much of these problems as possible, I finally have something which, as a professional, I am prepared to give to someone else.

Phase 2: Public editing. Your piece is now ready to go out for a sympathetic public edit from your supervisor. If you follow this process then when you get feedback you will be working at your best and therefore you will develop more and faster as an academic writer. I realise supervisor sometimes say "just give me something" or "let me see your ideas in their raw form". Ultimately you have to do what your supervisor tells you. Be aware that sometimes they are asking to see things out of desperation because you are so tardy in your production of work. As your writing is a representation of you professionally, personally I prefer to make sure it is a professionally, well produced piece before I let my editors work on it. But it is up to you.

Also note, after your supervisor reads your work you will then have to go back in a make changes. Sometimes that will mean going back to stage one, but usually it means revisiting stages 3 and 4.

Appendix

Part II

Exercise – Generic Structure:

TITLE

SUMMARY/ABSTRACT

ACKNOWLEDGMENTS

CONTENTS

INTRODUCTION

BACKGROUND

REVIEW OF LITERATURE

Summarise and evaluate books, articles, theses, etc.

Define the gap in the literature

Define and justify your project

Indicate thesis structure

Indicate results

Indicate contribution

THEORY

APPROACH

METHODS

MATERIALS

SUBJECTS

Identify method

Explicate method of inquiry

Define theoretical approach

Define instruments

Show links between your method and others

Justify your method

Justify your approach

ANALYSIS

RESULTS

Analysis/Results

Report what you did, list steps followed

Document the analysis, showing how you carried it out

Report what you found

Prioritize sections for the thesis or for an appendix

INTERPRETATION

DISCUSSION

Interpret what you found

Justify your interpretation

Synthesize results in illustrations, tables, graphs, summaries etc.

CONCLUSION

IMPLICATIONS

RECOMMENDATIONS

Contribution to knowledge

Potential future research

Implications for future practice

Report issues which were beyond the scope of this study

Strengths and limitations

APPENDIXES

BIBLIOGRAPHY

Exercise – Building a paragraph

Quantum physics might seem to undermine the idea that nature is governed by laws, but that is not the case. Instead it leads us to accept a new form of determinism: given the state of a system at some time, the laws of nature determine the *probabilities* of various futures and pasts rather than determining the future and past with certainty. Though that is distasteful to some, scientists must accept theories that agree with experiment, not their own preconceived notions.

(Stephen Hawking & Leonard Mlodinow (2010) *The Grand Design*. London: Batman.

p.34)

References and Resources

Useful books & articles:

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Useful Websites:

Monash University's Guide to Editing Your Thesis:

<http://www.monash.edu.au/lis/lionline/writing/general/thesis-edit/index.xml>

Mendeley Desktop: <http://www.mendeley.com/download-mendeley-desktop/>

Tim Albert Training: <http://www.timalbert.co.uk/>

Scrivener: <http://www.literatureandlatte.com/scrivener.php>

Grammarology: www.grammarology.co.uk

To analyse and develop academic style: www.writersdiet.com