

***** This note is from the "INTENSIVE ACADEMIC WRITING" course at the University of Oxford 2013***

WRITING A THESIS OR DISSERTATION: COURSE PROGRAMME 2013

Part 1

Writing an Introduction

Identifying and discussing patterns for the introduction to a thesis or dissertation. Indicating a gap in the field and writing an acceptable statement of this gap.

Reviewing the Literature 1: Citation Forms and Functions

Incorporating the work of others in your own writing. Choice of citation type and its implications.

Part 2

Reviewing the Literature 1: Citation Forms and Functions (continued)

Choice of reporting verb and the attitude of the writer to the work cited. Identifying the functions of citation.

Reviewing the Literature 2: Tense Choice and Organisation

The use of past, present and present perfect tenses with reporting verbs in order to discuss the literature. A pattern for organising the literature review chapter.

Part 3

Constructing Discussions and Arguments

Identifying and discussing a pattern for developing discussions and arguments. Making claims and adjusting their strength.

Writing a Conclusion

Identifying and discussing a pattern for writing a conclusion.

Part 4

Writing a Conclusion (continued)

Using modal verb forms in writing about future research.

Writing an Abstract

Identifying patterning in the abstract.

Part 5

Writing an Abstract (continued)

Grammar and vocabulary for emphasising the writer's contribution to the field.

Organisation of the Whole Thesis or Dissertation

Identifying and discussing patterns for the organisation of the whole thesis or dissertation.

While it is anticipated that each topic will be dealt with on the day or days given, it is possible that some minor variations may occur.

- Extracts from theses in the Oxford Academic Text Corpus are used with the permission of the authors, whose help is gratefully acknowledged.

TASK 1: Distinguishing features of a successful introduction to a thesis or dissertation

1. What features would you expect to find in a successful introduction to a thesis or dissertation?
Note down your ideas and discuss them with a colleague in class.
2. Here is a common pattern found in the introduction to a thesis. How far does it include the features you have mentioned?

A Model for Thesis Introductions**Often Present****Occasionally present****Move 1: Establishing a Territory****STEPS**

1. Claiming centrality
2. Making topic generalisations and giving background information
3. Defining terms (Eg, A, So)
4. Reviewing previous research

Research parameters

Move 2: Establishing a Niche**STEPS**

- 1A. Indicating a gap in research
- 1B. Indicating a problem or need
- 1C. Question-raising (So, A)
- 1D. Continuing a tradition (M, So)

Counter-claiming

**Move 3: Announcing the Present Research
(Occupying the Niche)****STEPS**

1. Purposes, aims or objectives
2. Work carried out (Eg, Si)
3. Method
4. Materials or subjects
5. Findings or results
6. Product of research (Eg) or Model proposed (So)
7. Significance/ Justification
8. Thesis structure

Chapter structure

Research questions/ hypotheses

Theoretical position (So)

Defining terms

Parameters of research

Application of product (Eg)

Evaluation of product (Eg)

Key: A = Arts/ Humanities; So = social sciences; Eg = engineering; Si = science; M = medicine

TASK 2: Applying the model to a social science thesis

Extract A is the introduction to a thesis on Canadian foreign policy.

1. How far does this introduction fit the pattern for thesis introductions given above?
2. Mark it up according to moves and label them.
3. Discuss your ideas with a colleague in class.

EXTRACT A**Fire-Proof House to Middle Power: Metaphor, Identity and Canadian Foreign Policy, 1939-1950**

On 27 July 1950, the Canadian cabinet approved the participation of Canadian troops in the Korean War. The decision was made on the funeral train of former Prime Minister William Lyon Mackenzie King, which gave it a certain irony. While in office in the 1930s and 1940s, King had sought to protect the country by limiting its commitments and leaving world problems to world powers. The decision to go to Korea was antithetical to everything he had represented, and was a mark of how much Canada's foreign policy had changed in fifteen years.

Canada underwent 'a far-reaching diplomatic revolution' between 1939 and 1950. Before the Second World War, Canada boasted of being 'a fire-proof house, far from inflammable materials.' The country and its leaders pursued a naive isolationism... The war led to a dramatic increase in the country's power... (the war) also saw a dramatic change in Canada's foreign political behaviour. The country was generally more assertive, and adopted a new policy of 'active internationalism'. Canadians used a new metaphor to describe their country: the 'fire-proof house' was now a 'middle power'... the 'middle power' image – dominated Canada's foreign policy until the 1960s, and continue(s) to play a significant part in it today.

The change in Canada's foreign policy between 1939 and 1950 has traditionally been explained by the concurrent change in its power... The problem is that exponents of this view have had difficulty proving their case. Other states underwent similar repositionings as Canada did, yet did not come to play the same role. The middle power idea does not appear to have much value except as a self-description, and we are left without a good explanation for the distinctive way in which Canada adjusted to the postwar world.

This thesis argues that we can find a better explanation for Canada's behaviour by studying the metaphors Canadians used to define themselves and their country. J.L. Granatstein observed that Canada's perception of itself has often been shaped by its role in the world. But the reverse of his observation is equally true. Canada's role in the world has often been shaped by her perception of herself.

I hope to demonstrate that the middle power idea... is more important as a *metaphor*: as Canada's self-description... This approach should explain some of the idiosyncracies of Canadian policy, as well as our persistent inability to identify a middle power 'category' or a fixed middle power 'role'.

TASK 3: Investigating move 2:1A/B: the gap or problem

Move 2:1A/B, indicating a gap or problem, enables the writer to claim that their work is filling a clear need in the research field. However it has to be carefully written, as it involves at least an implicit criticism of others in the field.

Extract B1 is Move 2 of the introduction to the thesis on Canadian foreign policy. Extract B2 is a re-written version of the same paragraph.

1. Compare the two versions and underline the changes made.
2. Explain in each case exactly what differences in effect the two versions produce and how they are achieved.
3. Which version is more acceptable and why?
4. Discuss your ideas with a colleague in class.

EXTRACT B1

The change in Canada's foreign policy between 1939 and 1950 has traditionally been explained by the concurrent change in its power... The problem is that exponents of this view have had difficulty proving their case. Other states underwent similar repositionings as Canada did, yet did not come to play the same role. The middle power idea does not appear to have much value except as a self-description, and we are left without a good explanation for the distinctive way in which Canada adjusted to the postwar world.

EXTRACT B2

Researchers such as Brown (1990) and White (1991) have explained the change in Canada's foreign policy between 1939 and 1950 by the concurrent change in its power... The problem is that these scholars have been unable to prove their case. The middle power idea does not have any value except as a self-description, and there is no satisfactory explanation for the distinctive way in which Canada adjusted to the postwar world.

TASK 4: Identifying the Gap or Problem

Here are four extracts from theses in biochemistry, politics, medicine and materials science. Each contains an example of move 2:1A/B the gap or problem. Moves 3:1, the purpose of the present research may also be present.

1. Locate the gaps or problems.
2. Which language signals are used to introduce each gap or problem?
3. Is move 3:1 present? If so, underline the language that signals it.
4. Discuss your findings with a colleague in class.

EXTRACT C

Chemicals that cause GTP concentration to drop, such as decoyinine, a drug that inhibits GMP synthetase, induce sporulation (Freese *et al.*, 1979). However, there is at present little knowledge on how stress causes a reduction in GTP levels or how such information is transmitted to the transcriptional apparatus.

Task 4 (continued)**EXTRACT D**

Alpha has been studied before, but relatively little attention has been paid to the project, despite its importance for the West, and the intimate involvement of Eden, Dulles, Macmillan and Eisenhower in its conception and application⁷. Moreover, what has been written on the subject has generally been limited to the context of the run-up to Suez, or of Arab-Israeli relations. This present study argues that *Alpha* also reveals a great deal about western policy, and US-UK relations in the context of declining British power and rising US influence.

EXTRACT E

Whereas inhalational anaesthetics have received much attention less is known about the possible protective effects of intravenous anaesthetics such as propofol and fentanyl. One objective of the present investigation was to examine the effects of intravenous as well as inhalational anaesthetics on recovery after a short period of ischaemia.

EXTRACT F

There have been a number of investigations of dynamic phenomena [1.7, 1.8], as well as studies to elucidate two and three-dimensional epitaxial-growth mechanisms [1.9, 1.10]. By carefully controlling the imaging conditions, it has even been demonstrated that STM can be used as a deliberate atomic manipulation tool [1.11]. However, in spite of all the information gleaned to date using STM, quantitative understanding of this technique is surprisingly under-developed.

TASK 5: Identifying the gap or problem and the justification

Here is an extract from the end of the introduction to a politics thesis. It contains an example of both move 2:1A/B the gap or problem and move 3:7 the justification for the present research.

1. Locate the gap or problem and underline the language that signals it.
2. Locate the justifications and underline the language that signals them.
3. Compare your ideas with those of a colleague in class.

EXTRACT G

The mid-1950s are a period overshadowed in the academic literature by the Suez crisis of 1956, a defining moment in British policy, and in relations between the West and the states of the Middle East. Because of the watershed quality of Suez, the period leading up to Suez is one which has in general been under-researched and ignored. Yet the events in the years leading up to Suez are just as revealing about the contradictions and illusions underlying western policy. Furthermore, study of the period sheds interesting light on US-UK relations, and to an extent belies the image presented by Suez, that British and American aims were antagonistic. An examination of the *Alpha* project illustrates that close co-operation at times coexisted with competition.

VOCABULARY

Watershed quality: *The event was important because it marked the beginning of a new stage.*

TASK 6: Constructing a Gap or Problem

1. Write a short paragraph (around 100-200 words) which constructs a gap or problem in your own field (move 2:1A/B).
2. If you wish you may also include the aim of your own work (move 3:1), or a justification for why the problem is worth researching (move 3:7).

LANGUAGE SIGNALS OF THE GAP OR PROBLEM

1. Use of *little, few, no, none of*.

...appears to have been little considered. There have been very few investigations of...

2. Use of *limited, restricted*.

Traub's work is limited by the fact that his division is based on so few characters.

3. Use of *lack of*.

One reason for the lack of success may be the limited time...

4. Use of *problems or difficulties*.

There are, however, many problems to be solved. There are many difficulties involved in...

5. Use of *negative verbs*.

...are not available.

6. Use of *phrases contrasting with other work*.

*Earlier research has focused on... **rather than on**...*

*Previous studies have emphasized...**as opposed to**...*

*Although considerable research has been devoted to..., **rather less attention has been paid to**...*

ACADEMIC WRITING

REVIEWING THE LITERATURE 1: CITATION FORMS AND FUNCTIONS

Different citation conventions are followed in different fields and you must be aware of and use the appropriate conventions. The language forms and functions presented here can be used with both author/date and numerical citation conventions and examples of both have been included. Whatever citation system you follow, however, you have some choice over the way in which a citation appears in your text. We will look at some of the language options for citing and how these are used by writers to carry out different citation functions.

TASK 1: Identifying Citation Types

In language terms, there are two major ways of citing. The distinction between them rests upon the way in which the citation is incorporated into the text.

1. Read the following ten examples of citations taken from theses.
2. Divide them into two groups of **five** according to the way in which the citation is incorporated into the text.
3. Pay particular attention to **whether a name appears in the sentence** and if so, **where and how** it occurs.
4. Discuss your ideas with a colleague in class. You should be able to explain the reasons for the division you have made.

Citation Examples

1. Cook (1993) suggests a more complex measure of significance.
2. Region 2.1 is involved in E-binding (Lonetto et al., 1992).
3. I will refer to aspects of Hunston's (1989) model of evaluation where relevant in this thesis.
4. The corpora were examined using the concordance program of WordSmith Tools (Scott, 1999).
5. Many other authors however (e.g. Ditlefsen and Huntley, 1994; Spooner, 1994; Duller and Bøtter-Jensen, 1996; Alexander et al., 1997) have made interpretations based on single primary OSL trap models.
6. It was suggested by Dew-Hughes (1995) that the formula could be used to predict the complete $I_c(B)$ curve.
7. It has been suggested¹¹⁴ that a regular array of QD would behave as an 'artificial crystal'.
8. The technological advantages are aptly demonstrated by the work of Barrett et al. (1996).
9. The heterogeneity of the international system is attributed to the fact that states are at different "stages of growth" (see Rostow: 1990).
10. According to Darby "United States pressure intensified during the three months before the publication of the 1966 White paper."²⁰

In task 1 you have made the distinction between **integral** and **non-integral** citation. Both types can occur with author/ date and numerical citation conventions.

A. INTEGRAL CITATION

The cited author's name has a grammatical role within the running text, Examples: 1, 3, 6, 8, 10.

B. NON-INTEGRAL CITATION

The name of the cited author appears only in brackets or a number refers to the name, which is listed elsewhere. Examples: 2, 4, 5, 7, 9.

TASK 2: Comparing integral and non-integral citations

1. Compare the following two sets of extracts, A1, re-written as A2, comes from an international relations thesis; B1, re-written as B2, comes from a thesis in medicine.
2. How does the type of citation chosen affect the importance of the cited author?
3. How does the type of citation chosen affect the way that the information is read and understood?
4. How would you expect the original versions to continue? Do you think the re-written versions could continue in the same way? Why or why not?
5. What functions can the original citations be used to perform? Can the re-written versions perform the same functions?
6. Discuss your ideas with another student.

Extract A1 Original Version Integral Citation

Armstrong notes that nonconformist states can sometimes selectively apply the norms of international society in order to undermine that society (Armstrong, 1993: 302-303).

Extract A2 Re-written Version Non-Integral Citation

Nonconformist states can sometimes selectively apply the norms of international society in order to undermine that society (Armstrong, 1993: 302-303).

Extract B1 Original Version Non-Integral Citation

In cardiac cells the predominant calcium channels are L and T-type channels (Mitro et al, 1986).

Extract B2 Re-written Version Integral Citation

Mitro et al (1986) note that in cardiac cells the predominant calcium channels are L and T-type channels.

REPORTING VERBS AND PATTERNS

Reporting verbs are useful in citation because they allow you to introduce the ideas and propositions of other authors and at the same time to comment on the cited author's work through your choice of reporting verb. There are two common grammar patterns.

1. The **Verb that** pattern is a reporting verb followed by *that* and a clause.
*Cox **asserts** that states come to resemble one another through a combined process of economic, social, and ideological penetration.*

The reporting verb is in bold. By using *assert*, rather than other possibilities such as *mention* or *suggest* the thesis writer shows that he thinks Cox puts forward his idea firmly and perhaps without sufficient support.

The clause beginning with *that* contains the cited writer's idea or proposition. It is called the **complement clause** and contains the **complement verb**, *come*, which is underlined.

2. The **Verb Noun** pattern is a reporting verb (in bold) followed by a noun phrase (underlined).
*Keith Baker **describes** a fruitful attitude to intellectual history⁴.
Recent theories **have stressed** the importance of mobility or energy advantages (Thompson et al. 1987; Worner et al. 1991).*

The use of this pattern also enables the thesis writer to incorporate their assessment of the cited writer's work through an evaluative adjective (*fruitful*) or in the noun phrase itself (*importance*).

When you use a reporting verb, remember that some verbs can occur in more than one pattern. In order to use the verb correctly, you need to know the pattern(s) associated with it.

THREE TYPES OF REPORTING VERB

The use of reporting verbs is a key means by which writers signal where they stand in relation to the cited author's work.

There are three major ways in which a reporting verb comments on the work of the cited writer.

1. **Factive:** the thesis writer portrays the cited author as presenting true information or a correct opinion; for example, *demonstrate, prove*.
2. **Counter-factive:** the thesis writer portrays the cited author as presenting false information or an incorrect opinion; for example, *confuse, fails to show*.
3. **Non-factive:** the thesis writer gives no clear signal as to his/her attitude towards the cited author's information or opinion; for example, *investigate, state*.

Counter-factives are not very frequent, perhaps because of a reluctance to disagree explicitly in public with a fellow researcher.

In all cases the factivity of a verb is only a **potential**. It can **always** be changed by other language choices in the surrounding context, for example by a negative form. Nevertheless, it is still possible to determine the most probable or default factivity of most verbs.

TASK 3: Identifying reporting verbs

1. Identify and underline the reporting verbs in the following ten extracts from theses.
2. Decide whether each reporting verb is factive, counter-factive or non-factive.
3. Not all verbs are reporting verbs, but there may be more than one reporting verb in an example.

1. Baudrillard argues that representations of reality are really constructions of reality.⁸
2. Cox asserts that states come to resemble one another through a combined process of economic, social, and ideological penetration.
3. More high resolution images of carbon appeared when Iijima [31] considered the experimental and theoretical aspects of imaging finitely-sized objects by HRTEM.
4. This material is found to be relatively electron-beam sensitive [66].
5. Isaiah Berlin, largely because of the “patriotism good, nationalism bad” distinction, misses out on this vital aspect of Herder’s thought.
6. Hathaway suggests that it was not the intention of the *Convention* drafters to equate persecution with all forms of serious harm.²⁴
7. However, as Macklin points out, ‘in the international realm, not all rights are created equal.’²⁵
8. The ion environment in a CEHRTEM was acknowledged by Rodriguez et al [3], who recognised it as a useful technique.
9. Finally, Iijima reported a whole host of large balloon-like carbon structures and shells with concave and convex curvatures [103].
10. Mack Smith stresses Mazzini’s hatred for xenophobia, his schemes for European unification and his popularity among the liberal elite of Victorian England. He plays down or ignores concepts like mission, historical inevitability and the General Will.

FUNCTIONS OF CITATION

We can distinguish several functions of citation. A given function can be expressed by means of different forms and a single citation may perform more than one function simultaneously.

1. **Attribution** indicates only that the language or content comes from a source other than the thesis writer. This is the basic function of **all** citation, but language signals in the text may indicate other, additional functions.
Integral: *According to Darby “United States pressure intensified during the three months before the publication of the 1966 White paper.”²⁰*
Non-integral: *Region 2.1 is involved in E-binding (Lonetto et al., 1992).*
2. **Exemplification** gives a citation or citations as examples. Often non-integral and signalled by *e.g.* or *for example*.
Non-integral: *Many other authors however (e.g. Ditlefsen and Huntley, 1994; Spooner, 1994; Duller and Bøtter-Jensen, 1996; Alexander et al., 1997) have made interpretations based on single primary OSL trap models.*
3. **Further Reference** gives the citation where further information can be found. Often non-integral and signalled by *see*.
Non-integral: *The heterogeneity of the international system is attributed to the fact that states are at different “stages of growth” (see Rostow: 1990).*

FUNCTIONS OF CITATION (continued)

4. **Application** shows how the thesis writer applies or uses the cited author's concepts or work.
Non-integral: *The corpora were examined using the concordance program of WordSmith Tools (Scott, 1999).*
5. **Evaluation** expresses a positive or negative evaluation by the thesis writer of the cited author's work.
Integral: *The technological advantages are aptly demonstrated by the work of Barrett et al. (1996).*
Non-integral: *It has been suggested¹¹⁴ that a regular array of QD would behave as an 'artificial crystal'.*
6. **Comparison of Thesis Writer's Work with that of Cited Author(s)** establishes points of similarity and difference between the thesis writer's findings or interpretation and that of other authors.
Integral: *The evidence seen on this occasion is in agreement with Pang et al's deduction that fullerenes can form from graphene-layer fragments [14].*
Non-integral: *This finding echoes those of other workers (e.g. Rhodes, 1990 and Stokes, 1994).*
7. **Establishing Links between Sources** shows how the thesis writer sees the relation(s) between cited authors. Similarities and/or differences may be pointed out.
Integral: *A further dissociation of $a/2<110>$ superpartials into Shockley partials has been predicted by Marcinowski et al (1961) and Copley and Kear (1967) and directly observed by Crimp and Hazzledine (1989) and Mills, Baluc and Karnthaler (1989).*

TASK 4: Matching citations to functions

1. Read the following ten extracts with citation.
 2. Decide what function or functions the citation is performing and underline the language that supports your decision.
 3. Look for reporting verbs and take into account their factivity. Notice any evaluative language, including adverbs, nouns and adjectives; look for language indicating an example or a further reference.
 4. Discuss your ideas with another student.
1. In those calculations which use GGA in this thesis, the Perdew and Wang (1991) functional has been used.
 2. For such a central aspect of neorealist theory, Waltz wastes surprisingly few words explicating the nature of the two processes... Only a few pages are devoted to carefully describing these concepts (1979: 73-77; 124-128)
 3. Thus we arrive at the central hypothesis to be tested in this thesis: that increased case significance is associated with reduced attitudinal behaviour. This is in contrast to the prediction of Brenner and Stier (1996).
 4. The limitations of Lévi-Strauss's 'recovered Other' are illuminated by Dipesh Chakrabarty's description of the double-bind through which the subject of Indian history articulates himself.
 5. There are two key assumptions which are made in the derivation of this formula (see Christian 1965 and Glasstone, Laidler and Eyring 1941 for further discussion).
 6. Bahrick's (1984) study investigated Spanish second language attrition among approximately 500 individuals.

TASK 4 (continued)

7. The present chapter will explore the international society perspective on state socialization in, and through, the work of David Armstrong (1993)
8. The shape of dimples in a AlCu alloy has been measured and found to be in agreement with the theoretical analysis (Ashby et al (1969).
9. Hemker's experimental work then led to the formulation of two conflicting models which attempted to explain the phenomenon of inverse creep. The work of Schneibel and Horton (1988), Caron, Khan and Veyssi re (1989) and, notably, Rong, Jones and Smallman has elucidated some of the processes which are occurring at the microstructural level, Results from different research groups often conflict, however.
10. Other scholars have concentrated their efforts on determining 'how law affected a given decision' in international affairs.¹⁴ Such was the purpose, for example, of Henkin's How Nations Behave,¹⁵ of Abram Chayes' The Cuban Missile Crisis: International Crises and the Role of Law,¹⁶ and of Anthony Boyle's World Politics and International Law.¹⁷ Focusing either on one incident or on several each author sought to explain the outcome of a particular chain of events by explaining the way international law constrained or failed to constrain state actors. I will follow a similar approach in my analysis of the international community's decision to create safe areas in Bosnia-Herzegovina.

TASK 5

Write a short paragraph of about 200 words including citation. Include some different citation functions.

REPORTING VERBS

The following reporting verbs are all used in the **Verb that** pattern. The verbs are grouped into meaning areas. The verbs in bold tend to be factive.

VERBAL COMMUNICATION (verbs of saying or text verbs)

suggest	argue	accept	predict	assert	report	note	propose
hypothesise	conclude	admit	estimate	emphasise	write	mention	explain
postulate	claim	acknowledge		insist	state	observe	complain
imply	contend			stress	say	remark	
posit	maintain		point out	add	comment		
conjecture				reply			
speculate							

RESEARCH ACTION
(verbs of doing or research verbs)

show	find
indicate	note
demonstrate	observe
reveal	discover
confirm	calculate
imply	establish
	identify
	recognise

MENTAL PROCESS
(verbs of thinking)

assume
think
know
hold
deduce
feel
hope
infer
realise

ACADEMIC WRITING

REVIEWING THE LITERATURE 2: TENSE CHOICE AND ORGANISATION

The ways in which thesis writers cite other writers' work are quite complex and the reasons for the choice of certain tenses are not very well understood. However we can distinguish one grammar pattern that is frequently used for citation and we can offer some general guidelines. It should be stressed, though, these should not be taken as obligatory rules; rather they are tendencies that appear in the data and which you may find useful. You will be able to find many exceptions and you should look at writing in your own discipline to verify the applicability of the guidelines.

A Grammar Pattern for Citing

The **Verb + *that*** pattern is a **reporting verb** followed by ***that*** and a clause.

Cox asserts*that states come to resemble one another* ...

Cox asserts Reporting clause with reporting verb in bold

that states come to resemble one another ... Complement clause with complement verb underlined

This reporting verb pattern allows you to

- **introduce** the ideas and propositions of other authors and
- **comment** on the cited author's work at the same time.

TASK 1: Determining tense patterns

- Read the following short extracts from theses and fill out the table below.
- Then divide the extracts into **three** groups according to the combination of tense choices in the reporting and complement verbs.

1. Indeed, some authors have suggested that twentieth century history is best seen as a process of world-wide westernization (Von Laue:3).
2. Thompson found that active voice was more frequent than passive, although less so in agricultural botany, than in agricultural economics (2001: 123).
3. Previous research has found that there is a maximum value of SE-yield at 2.5 – 3 keV for silicon (Seiler, 1983).
4. Rhodes (1990) found experimentally that the OSL decay form was in fact influenced by prior bleaching
5. Cox (1987) asserts that this involves a degree of historical distortion.
6. Several writers⁶⁻⁸ have noted that Benjamin's dialectical image is both the medium of representation and the method of analysis, the theory, itself.
7. Thus Segal and Spaeth (1993) argue that the 'legal model' is the empirical version of the normative arguments.
8. In adult humans Schoeller *et al.* demonstrated that hair keratin and blood plasma had identical $\delta^{15}\text{N}$ values (Schoeller et al. 1984).
9. Research on animals has shown that the isotopic values of individual tissues can vary markedly from the average isotopic value of the whole body (DeNiro & Epstein 1978; DeNiro & Epstein 1981; Tieszen et al. 1983; Ambrose & Norr 1993; Tieszen & Fagre 1993).
10. Hyland (1996) argues that hedging is vital to the establishment of new knowledge claims.

Task 1 (continued)

	Subject of Reporting Verb	Reporting Verb	Reporting Verb Tense	Complement Verb	Complement Verb Tense
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

TASK 2: Explaining tense choices**Text Verbs**

A text verb refers to the cited work as a **text** or document. It is a verb of **verbal communication** and so it involves the use of **words** e.g. say, state. It is a verb of **saying**.

Research Verbs

A research verb refers to the cited work as a **research action**. It is a verb of **action** e.g. discover, recognise. It is a verb of **doing**.

1. Look at **the grammatical subject of the reporting verb** in each extract. In what way are the grammatical subjects within each group similar to each other? The citation type (integral or non-integral) may help you here. This will distinguish **one group** from the other two.
2. Look at the **reporting verbs** in each group. Do they primarily refer to the text (with an element of verbal communication in the meaning) or do they primarily refer to the research work (with an element of research action in the meaning)? This will distinguish between the last two groups.
3. Considering what you know about the uses of the tenses and taking into account your ideas about 1, 2 and 3 above, can you explain the reasons for the tense choices of the reporting verb and complement verb?
Discuss your ideas with a colleague in class.

SOME GUIDELINES ON TENSE CHOICE

STATEMENTS REFERRING TO SPECIFIC, INDIVIDUAL PIECES OF WORK: INTEGRAL CITATION

There are two possible ways of regarding a specific, individual cited work:

1. When the cited work is regarded as a **TEXT**, it exists in past, present and future time: its existence is timeless and therefore the **PRESENT TENSE** can be used in the reporting verb.
2. When the cited work is regarded as a **RESEARCH ACTION**, it happened at a specific time in the past and therefore the **PAST TENSE** can be used in the reporting verb.

A. Reporting verb in present simple. Complement verb in present simple.

A. Examples

Cox ***asserts*** that this ***involves*** a degree of historical distortion.

Ling and Anderson (1992) ***comment*** that non-random particle distributions ***are*** to be expected.

Explanation

- The present tense of the reporting verb is used because the cited source exists in past, present and future time. We understand that the finding is generalised because of the present tense of the complement verb. This form is used in about half the integral citations in social science and about a quarter of those in natural science.

B. Reporting verb in present simple. Complement verb in past simple.

B. Examples

Darby ***argues*** that the case for early withdrawal ***was strengthened*** in early 1966.

Explanation

- The present tense of the reporting verb is used because the source cited exists in past, present and future time. The use of the past tense in the complement verb indicates that the finding relates to a specific time in the past. This is used in about a quarter of social science citations in those disciplines that deal with past events. It is almost never used in natural science citation.

C. Reporting verb in past simple. Complement verb in past simple.

C. Examples

*Sun (1990) **discovered** that each region **showed** different work-hardening rate behaviour.*

Explanation

- The past tense is used in the reporting verb because the study is seen as a research action in past time. The past tense in the complement verb shows that we do not generalise from this finding. Its validity may (or may not) be limited to the study cited. This form is common in natural science integral citations (about a quarter of all these citations). It is also used with citations in social science studies which are based on empirical research.

D. Reporting verb in past simple. Complement verb in present simple.

D. Examples

*Widdra et al **found** that this pairing **occurs** at adsorption temperatures between 150K and 600K.*

Explanation

- The past tense is used in the reporting verb because the study is seen as a research action in past time. We understand that the finding is generalised because of the present tense of the complement verb. This form is common in natural science integral citations (about a quarter of all these citations). It is also used with citations in social science studies which are based on empirical research.

Note: The use of present perfect in the reporting verb with a named researcher almost never occurs in social science and is also rare in natural science.

STATEMENTS REFERRING TO GROUPS OF RESEARCHERS OR THE RESEARCH WORK IN GENERAL: NON-INTEGRAL CITATION

E. Reporting verb in present perfect. Complement verb in present simple.

E. Examples

***Many other observers have suggested** that convergence **follows** from one type of penetration or another. **It has long been known** that changing fields **produce** resistive losses in hard superconductors.*

Explanation

The present perfect is used because these statements look back over the work of more than one researcher and generalise from it. In social science the subject is often a group of people e.g. *commentators, scholars*. In natural science the subject is likely to be the work e.g. *previous research*, or the passive is used. The use of the present tense in the complement verb indicates that the argument is still current and relevant within the field.

Note: Other combinations of tenses with a present perfect reporting verb are very rare in both social and natural sciences.

TASK 3: Choosing tenses according to the patterns

Choose the correct tenses for the verbs given in brackets in the following extracts.

Take into account:

- the grammatical subject of the reporting verb and
 - whether the reporting verb primarily refers to the text or the research work
1. Thus, several commentators (REMARK) that Ward (SUPPORT) the argument.
 2. Pettifor (1977) (SHOW) that these interactions (BE) about 10% of the total interaction for d-band metals.
 3. Cohn (SUGGEST) that the wing image (BE TAKEN) from the Phaedrus¹.
 4. Interestingly, later in 1980, Iijima (NOTE) that graphitized carbon black (APPEAR) to show tetrahedral bonding at the boundary of two differently oriented planes [153].
 5. Work on the contrast mechanism (INDICATE) that the surface condition of a specimen (BE) the fundamental limitation on sensitivity and reproducibility for this technique.
 6. Secondly, Segal and Spaeth (ARGUE) that each variant (BE) itself not systematically falsifiable; in most court cases, each side will have at least some **legal** arguments to back up its case.
 7. Nietzsche (ARGUE) that the only authentic accounts of the world (BE) those which acknowledge themselves to be provisional fictions.
 8. However research (SHOW) that secondary recrystallisation (BE) possible in the presence of a stable dispersion.

The Structure of the Literature Review

When you write a literature review, it is important to organise the citations and show the reader this organisation by **signalling** the relationship between the cited works. You need to show not only **what** the cited works say, but **why** you have cited them. You can do this by using citation functions such as application, evaluation, establishing links between sources and comparing your work to the cited research. One frequently used structure is similar to that used for introductions:

A. Establishing a Thematic Territory

1. surveying the existing state of knowledge and non-research
2. claiming centrality of the theme
3. surveying research activities

B. Evaluating the State of the Field

1. negative: indicating a gap; making a counter-claim
2. affirmative: making a confirmative claim; making a relevancy claim; synthesising the theoretical framework or position

C. Announcing one's own Research

1. announcing the aim of the research
2. announcing the theoretical framework/position
3. announcing the research design or process
4. announcing the adoption or definition of terms

When you survey research activities, you can organise the citations in several ways e.g.

1. From general to specific
2. From less relevant (background to your study) to most relevant (crucial to your study)
3. Chronological order
4. By approach or school of thought

TASK 4: Investigating a Literature Review

Extract A is one paragraph from a literature review in computer science.

1. Mark it up according to moves and label them.
2. Discuss your ideas with a colleague in class.

EXTRACT A

Back in the early 1990's, the success of the Santa Fe Artificial Stock Market (SF-ASM) [3][5] sparked a significant research interest in simulated financial markets (using ABM). Many new models have been proposed since then [4]. However, the intelligent tools used in most of these works still did not employ current state-of-the-art AI techniques [4]. One reason is that many researchers working in this area do not have a computer science or engineering background. It is this increasing demand for more researchers from outside the economics discipline and the need for more sophisticated intelligent tools that motivated this project. In this project, we attempt to model an asset market following an agent-based modelling approach, where agents are constructed using several artificial intelligence tools.

TASK 5: Practice in choosing tenses

1. In the following extracts choose suitable tenses for the verbs given in capitals and in brackets.
2. Look out for time phrases which will determine tense and use the tense choice guidelines.

EXTRACT A: Studying Decision Making on the Supreme Court

What is special to studying judicial behaviour as strategic is that it considers how individual motivations combine to produce macro-level (i.e. Court) behaviour. In the case of voting fluidity – that is to say, a change in vote between the initial conference on a case and the final decision – Maltzmann and Wahlbeck (1996) (SHOW) both anecdotal evidence that Justices in fact (CHANGE) their votes on the basis of persuasion and changes in opinions, and also ‘jurimetric’ evidence that such changes (BE MOTIVATED) by strategic policy considerations. Epstein and Knight (1995) (DOCUMENT) precisely such strategic interaction in the decision making of Justices Brennan and Marshall, while Cook (1994, 1995) (ARGUE) that the make-up of Supreme Court voting blocs (BE) rational but ‘fuzzy’.

EXTRACT B: Stunning*

Heyndrickx et al (1975; 1978) (EXAMINE) the effects of 5 and 15 minutes coronary* artery* occlusion* on regional function in conscious dogs and (DISCOVER) that mechanical function (REMAIN) depressed for over 3 hours after 5 minutes occlusion and greater than 6 hours after 15 minutes occlusion. Even at such an early stage in this field, Braunwald and Kloner (1982) (PROPOSE) mechanisms for the delayed recovery of function which (INCLUDE) reduction in myocardial* ATP concentration and abnormalities in calcium influx, mechanisms which (BE STILL REGARDED) as important factors in the development of stunning to the present day. Their definition of stunning (CHANGE) little in recent years. However, a more accurate description (BE) fully reversible yet prolonged depression of mechanical function following brief periods of ischaemia* even after myocardial blood flow has been fully restored (Bolli, 1990).

Glossary

stunning	making someone unconscious	occlusion	short closure
artery	tube in the body that carries the blood	myocardial	concerns the muscle of the heart
coronary	of the heart	ischaemia	reduction of blood supply

NOTES AND ORIGINAL VERSIONS OF THE TASKS

TASK 3 Original versions

1. Thus, several commentators HAVE REMARKED that Ward SUPPORTS the argument.
2. Pettifor (1977) SHOWED that these interactions WERE about 10% of the total interaction for d-band metals.
3. Cohn SUGGESTS that the wing image IS TAKEN from the Phaedrus¹.
4. Interestingly, later in 1980, Iijima NOTED that graphitized carbon black APPEARED to show tetrahedral bonding at the boundary of two differently oriented planes [153].
5. Work on the contrast mechanism HAS INDICATED that the surface condition of a specimen IS the fundamental limitation on sensitivity and reproducibility for this technique.
6. Secondly, Segal and Spaeth ARGUE that each variant IS itself not systematically falsifiable; in most court cases, each side will have at least some **legal** arguments to back up its case.
7. Nietzsche ARGUES that the only authentic accounts of the world ARE those which acknowledge themselves to be provisional fictions.
8. However research SHOWED that secondary recrystallisation WAS possible in the presence of a stable dispersion.

TASK 4

Back in the early 1990's, the success of the Santa Fe Artificial Stock Market (SF-ASM) [3][5] **sparked a significant research interest** in simulated financial markets (using ABM). (A1. existing state of knowledge and A2. centrality claim in bold) Many new models have been proposed since then [4]. (A3. survey of research activities) However, the intelligent tools used in most of these works still did not employ current state-of-the-art AI techniques [4]. (B1 indicating a gap) One reason is that many researchers working in this area do not have a computer science or engineering background. (reason for the gap) It is this increasing demand for more researchers from outside the economics discipline and the need for more sophisticated intelligent tools that motivated this project. (reason for research) In this project, we attempt to model an asset market following an agent-based modeling approach, where agents are constructed using several artificial intelligence tools. (C1 aim of research)

Notes

As this is only a single paragraph, there is only a mention of research activities rather than a survey. After the initial statement of the gap, there are 2 sentences that give reasons and connect the gap closely to the writer's current research. These can also be considered as part of B1.

TASK 5 Original versions

EXTRACT A: Studying Decision Making on the Supreme Court

What is special to studying judicial behaviour as strategic is that it considers how individual motivations combine to produce macro-level (i.e. Court) behaviour. In the case of voting fluidity - that is to say, a change in vote between the initial conference on a case and the final decision - Maltzmann and Wahlbeck (1996) **SHOW*** both anecdotal evidence that Justices in fact **CHANGE** their votes on the basis of persuasion and changes in opinions, and also 'jurimetric' evidence that such changes **ARE MOTIVATED** by strategic policy considerations. Epstein and Knight (1995) **DOCUMENT** precisely such strategic interaction in the decision making of Justices Brennan and Marshall, while Cook (1994, 1995) **ARGUES** that the make-up of Supreme Court voting blocs **IS** rational but 'fuzzy'.

*Note that present tense 'show' is what appeared in the original, but 'showed' would follow the guidelines and would also be acceptable here. Present tense may have chosen to make the review

more general, indicating the state of the art in this field. Social sciences tend to use more present tense than natural sciences, too.

EXTRACT B: Stunning

Heyndrickx et al (1975; 1978) **EXAMINED** the effects of 5 and 15 minutes coronary artery occlusion on regional function in conscious dogs and **DISCOVERED** that mechanical function **REMAINED** depressed for over 3 hours after 5 minutes occlusion and greater than 6 hours after 15 minutes occlusion. Even at such an early stage in this field, Braunwald and Kloner (1982) **PROPOSED** mechanisms for the delayed recovery of function which **INCLUDED** reduction in myocardial ATP concentration and abnormalities in calcium influx, mechanisms which **ARE STILL REGARDED** as important factors in the development of stunning to the present day. Their definition of stunning **HAS CHANGED** little in recent years. However, a more accurate description **IS** fully reversible yet prolonged depression of mechanical function following brief periods of ischaemia even after myocardial blood flow has been fully restored (Bolli, 1990).

ACADEMIC WRITING CONSTRUCTING DISCUSSIONS AND ARGUMENTS

The focus here on constructing discussions and arguments does not imply that you will have a specific chapter or chapters with this title. Discussing and arguing are fundamental to **all** academic writing and you will do this throughout all the chapters of your thesis/dissertation. Discussions and arguments also take place at every level of the thesis, from the major thesis statement itself down to less important minor points. Here we will focus on discussions and arguments based on the writer's own work, but of course you can also discuss the work of others or general disciplinary ideas.

TASK 1: Distinguishing features of a successful discussion/argument

1. What features would you expect to find in a successful discussion/argument in a thesis? Note down your ideas and discuss them with another student in class.
2. How far does the following pattern include the features you have mentioned?

A PATTERN FOR THESIS DISCUSSIONS/ARGUMENTS

MOVE 1: Initiating the Discussion/Argument

STEPS

1. **Background Information** (optional): information necessary to understand the discussion/argument, e.g. restatement of the aim, hypothesis, relevant theory; summary of the method or previous research.
- 2A. **Statement of Idea:** a statement arising from the writer's research. (discursive theses)
- OR**
- 2B. **Statement of Result:** a statement arising from the writer's data. (empirical/observational theses)

MOVE 2: Developing the Discussion/Argument

STEPS: The steps in move 2 can occur and recur in any order.

- 1A. **Expansion/Limitation:** Further detail or limitations on the idea or result. May include a comment on whether a result is expected or surprising.
- AND/OR**
- 1B. **Explanation:** Reasons to explain the idea or result. May present alternative explanations.
- AND/OR**
- 1C. **Exemplification:** Example(s) to illustrate the idea or result.

AND/OR

- 1D. Comparison with Previous Research:** comparison of the idea or result with those reported in the literature. There are 3 possibilities:
- In agreement:** others' results/ideas **support** the writer's result/idea.
 - In contrast:** others' results/ideas **conflict** the writer's result/idea.
 - Partial agreement/contrast:** others' results/ideas neither wholly support nor wholly conflict with the writer's result/idea.

MOVE 3: Concluding the Discussion/Argument
STEPS

- 1. Claim:** a generalisation arising from the initial statement in move 1 step 2. In major claims this is the writer's contribution to research in their field; in less important claims this is what the writer wants the reader to accept.
- 2. Limitation (optional):** the writer introduces one or more limitations concerning their claim. Limitations may form part of the claim itself through the use of hedging.

NOTE

- For an extended discussion/argument, writers use **a series of move cycles**. Move 3 may occur after each Move 2, or there may be a single Move 3 after several cycles of Moves 1 and 2: e.g. 1,2,3,1,2,3 OR 1,2,1,2,3.

TASK 2: Identifying Patterns in a Discussion/Argument

Here is part of a discussion/argument on the construction of stance from a thesis in applied linguistics. It is about the frequency of integral and non-integral citation in different text types and disciplines.

1. Read the extract and mark up the paragraph according to moves and steps and label them.
2. Discuss your ideas with another student.

EXTRACT A**The Construction of Integral Citation**

As seen in Table 6.30, integral citation is much more frequent in both corpora than non-integral citation. This result is in contrast with those of Hyland (2000) for research articles; he found that, apart from philosophy, all the disciplines he examined showed higher figures for non-integral citation. Although the results of Thompson (2001) for theses in agricultural botany accorded with those of Hyland, in agricultural economics the preferred choice was integral citation. In comparing these findings to my own, however, we must bear in mind that my data refer only to reporting clauses, while those of Thompson and Hyland concern all citations. It is possible, therefore, that the differences in citation type between my data and those of Hyland and Thompson may be due to the pattern investigated. This explanation is confirmed by calculations which show that in both my corpora, over three-quarters of integral citations occur with a human subject. Thus the results presented above show that integral citation is primarily carried out using a reporting clause with a human subject.

TASK 3: Investigating Claims

The way in which claims are constructed varies according to the discipline and type of study you are writing. This is because each discipline has its own conception of what constitutes knowledge, evidence, proof, sound argument and so on. Thus in order to be convincing to other

members of the field, your claim must reflect the norms, standards and values of your own discipline.

- 1.Extract A contains a claim from a social science thesis and extract B contains a claim from a natural science thesis. Read them and underline each claim.
- 2.Which words signal the claims?Pay particular attention to grammatical subjects, verbs and adverbs.
- 3.First focus on the differences between the claims. Look at the grammatical subjects and decide who or what is responsible for the claim. Can you explain why a different subject is chosen in each case?
- 4.Look at the verb chosen and think about the distinction between text and research verbs. Can you explain why this type of verb is chosen in each case?
- 5.Now focus on the similarities between the claims. What grammatical pattern is used to signal the claims and what is its position in the sentence? What tense is used? Can you suggest reasons why this pattern is used to construct claims in this way?
- 6.Discuss your ideas with another student in class.

TASK 3:Investigating Claims (continued)

EXTRACT A

‘Middle power’ is a *metaphor* which stands in for a longer description of the country to which it is applied. When we use a term like great power or middle power, we make certain assumptions about the country to which we apply it. I argue that Canada’s peculiar notion of middleness – *its identity* – can account for its behaviour in the immediate post-war period.

EXTRACT B

Although a linear dependence is not observed from the experimental data (Figure 5.14), a broad trend is apparent. The difference in C_{pn} between these materials cannot be accounted for in terms of the difference in their backscattered coefficients. Therefore, these results demonstrate that dopant contrast depends upon the width of the band gap and the corresponding ionisation energy.

TASK 4: Adjusting the Strength of the Claim

- 1.Extract A1 below is the original version from a thesis in physiology. It contains three claims. Identify the way each claim is signalled. Underline these parts of the text.
- 2.Extract A2 is the same extract but with the claims re-written in a different form. Again underline the way each claim is signalled.
- 3.Compare the original with the re-written version. What differences do you notice between the way in which each claim is signalled? Compare claim 1 in A1 with claim 1 in A2 etc. Pay attention to the grammatical structure used, the grammatical subjects, the verbs and adverbs.
- 4.Form the evidence of these signals, decide which is the stronger claim in each case and explain why?
- 5.Discuss your ideas with another student in class and make a list of the factors that lead to the strengthening or weakening of a claim.

EXTRACT A1 Original Version

Bio-apatite also had a strong correlation to the stable isotope ratios of the bulk diet, suggesting that ultimately all the food consumed is used for energy production. These results clearly indicate how

dietary biochemical components are used in the body. Body collagen $\delta^{13}\text{C}$ reflects the isotopic signal of the dietary protein, with a small contribution from the dietary carbohydrate and lipid, while the bio-apatite $\delta^{13}\text{C}$ signal integrates all the dietary sources. This would appear to confirm the basic premise of the protein routing theory.

EXTRACT A2 Re-Written Version

Bio-apatite also had a strong correlation to the stable isotope ratios of the bulk diet. It is clear, then that ultimately all the food consumed is used for energy production and we can also see how dietary biochemical components are used in the body. Body collagen $\delta^{13}\text{C}$ reflects the isotopic signal of the dietary protein, with a small contribution from the dietary carbohydrate and lipid, while the bio-apatite $\delta^{13}\text{C}$ signal integrates all the dietary sources. These results confirm the basic premise of the protein routing theory.

TASK 5: Identifying Hedges and Signals of Confidence

Read the following statements. Identify and underline the hedges and decide whether they are approximators or shields; identify and underline the signals of confidence.

1. From the VARCOOK parameter it may be concluded that the Justices as a body have voted significantly more often in a liberal direction in cases classed as significant.
2. Brain and hair generally had slightly higher $\delta^{13}\text{C}$ values and other organs slightly lower $\delta^{13}\text{C}$ values than the diet. Bone collagen was enriched by about 3% and bone carbonate enriched by between 10 and 12% relative to the diet.
3. In his discussion of representation, Said seems to imply that there is a 'real' and knowable orient, that a form of truth is obtainable.
4. It follows from this observation that the text's presentation is misleading. The Sand subtext was of course already present. Clearly it is unhelpful to approach the work in terms of intention as Hina does, and future studies might be advised to do so instead on the basis of effect and response.

TASK 6: Constructing a Claim

Write a short paragraph in which you give results and/or develop an argument and come to a claim. Use a suitable reporting clause to signal your claim and make appropriate language choices to indicate the strength of the claim.

FACTORS THAT STRENGTHEN OR WEAKEN A CLAIM

Sentence

- Claim has its own sentence e.g. *These results clearly indicate how dietary biochemical components are used in the body.* **STRENGTHENED**
- Claim is part of another sentence e.g. *The two results show why APBs are good nucleation sites for second layer islands, and indicate that a small amount of strain energy can have a large effect in growth processes.* **WEAKENED**

Clause type

- Claim introduced by a main clause e.g. *It is clear that...* **STRENGTHENED**
- Claim introduced by a non-finite clause e.g. *...suggesting that...* **WEAKENED**

Reporting Verb Form and Tense

- Passive with *it* subject: e.g. *it is argued that...* **WEAKENED**
- Present tense: e.g. *we conclude that...* **STRENGTHENED**
- Past tense: e.g. *this thesis suggested that...* **WEAKENED**

Grammatical Subject

- Personal pronoun e.g. *we* (natural science) and *I* (social science/humanities) **STRENGTHENED**
- Specific noun: e.g. *these results* **STRENGTHENED**
- Non-specific pronoun e.g. *this* **WEAKENED**

Reporting Verb

- Factive e.g. *show* **STRENGTHENED**
- Non-factive e.g. *suggest* **WEAKENED**

Hedging/Signalling Confidence

- Hedge e.g. *seem, perhaps*, **WEAKENED**
- Signalling confidence e.g. *clearly* **STRENGTHENED**

HEDGING AND SIGNALLING CONFIDENCE

A **HEDGE** is a word or phrase ‘whose job it is to make things fuzzier’. There are two types:

1. an **approximator** indicates **lack of precision or clarity** and
2. a **shield** indicates **lack of commitment** by the writer to a statement he/she makes.

A **SIGNAL OF CONFIDENCE** is a word or phrase which strengthens a statement. They are often adverbs or adjectives.

Hedges and signals of confidence are common in discussions/arguments.

Examples

The following sentence contains an approximator: *not solely* and a shield; *does not seem to be*.
*Thus the frequency of integral citations in the natural science corpus **does not seem to be** due solely to the citation system used.*

In the following sentence, the adverb clearly is a signal of confidence.

*These results **clearly** indicate how dietary biochemical components are used in the body.*

HEDGES: APPROXIMATORS (indicating lack of precision/clarity)

Nouns:	tendency, estimate, approximation
Verbs:	tend, estimate, approximate
Adverbials:	roughly, approximately, largely, for the most part, partially, as a whole, generally, to a certain extent, usually, typically, in general
Adjectives:	rough, approximate, partial, general, usual, typical, estimated, preliminary

HEDGES: SHIELDS (indicating lack of commitment)

Nouns:	doubt, indication, likelihood, possibility, probability, suggestion, suspicion
Verbs:	could, may, might, should, appear, claim, indicate, seem, suggest, suspect
Adverbials:	conceivably, perhaps, possibly, probably, presumably, seemingly
Adjectives:	conceivable, doubtful, likely, possible, probable, unlikely

HEDGES: GRAMMAR STRUCTURES

‘it’:	it seems that; it is thought that; it is likely that;
‘there’:	there is a suspicion that
nominalization:	This possibility

SIGNALS OF CONFIDENCE

Nouns:	no doubt/ beyond doubt; certainty
Verbs:	establish; I believe; demonstrate; find; we know/it is known; prove; must; will/won’t
Adverbials:	always; certainly; clearly; conclusively; definitely; indeed; never; undoubtedly; of course; in fact; obviously
Adjectives:	certain; clear; essential; obvious; well-known

ACADEMIC WRITING WRITING A CONCLUSION

In the conclusion writers stand back from their work in order to view it in the wider context of the discipline as a whole or the real-world situation. Thus the purpose of the conclusion is in direct contrast to that of the introduction: it leads out from the narrow thesis topic to more general concerns.

TASK 1: Features of a successful conclusion

1. What features would you expect to find in a successful conclusion to a thesis? Note down some ideas and discuss them with a colleague in class.
2. Here are some common moves in conclusions to theses. They frequently, but not always, occur in the sequence given.

A PATTERN FOR WRITING A CONCLUSION

Move 1: Summary of the Findings

Highlights the most important findings. Aims, hypotheses and research questions can be re-stated and addressed.

Move 2: Implications of the Research

Places the research in the wider context of the field as a whole.

Move 3a: (in applied fields only) Applications of the Research

Indicates how the research may be useful in real-world situations.

Move 3b: (in applied fields only) Recommendations concerning Applications

Give specific detailed suggestions for use of the research.

Move 4: Contribution of the Thesis

Indicates what the writer considers to be the most valuable aspects of the research.

Move 5: Limitations of the Study

Moves 4 and 5 are sometimes grouped together as 'Evaluation'. They assess how far the aims of the thesis have been satisfied.

Move 6: Suggestions for Future Work

Follows from the gap set up in move 5, Limitations of the Study.

TASK 2: Identifying features of a conclusion

1. Extract A is part of the conclusion to an MPhil thesis.
2. Read it, identify the moves of the conclusion and mark them up. Note that the paragraphs do not equate directly to individual moves. There may be more than one move in one paragraph.
3. What tenses are most frequently used in the moves you have found? Can you explain why?
4. Compare your ideas with those of a colleague in class.

EXTRACT A

Thesis title: Crossing New Boundaries: Refugee Regimes and Gender Persecution

Conclusion

This thesis has been a study of the interplay between ideas, law and politics. It has sought to reveal how these factors have led to the emergence of a new norm in the international refugee regime...

The introduction to this thesis set out a dual research agenda which can now be reviewed. On the one hand, this study is intended to fit within the relatively new field of gender studies in international relations. Thus, the first chapter undertook an analysis of the role of gender in the legal construction of the refugee. It revealed gender bias in both the international definition of a refugee itself and its application by national refugee determination systems. A second objective was to undertake a case study of the emergence of a new norm in international relations. Chapters two and three were in effect such a study which revealed the importance of principled ideas and their connection to a broader normative framework...

What is the significance of the emergence of a new norm? It suggests that even within the constraints of the existing international system, change is possible... As to how new norms in refugee regimes emerge, this study suggests that ideas and law matter, not in a directly coercive sense, but by shaping the identities and interests of actors within the regime... The observations from this case study of the emergence of a new norm suggest the possibility for further research examining similar processes of normative development in different international issue-areas. Examining how norms emerge in different contexts could lead to greater understanding of the genesis and effects of norms in international relations.

What has not been fully revealed in this analysis is the extent to which normative developments in refugee regimes have tangible consequences. Of course, one would expect practices to follow policy changes, but the rate, scope and depth of their implementation is difficult to ascertain. A review of published refugee case law gives an initial indication that the introduction of gender sensitive refugee policy is encouraging the practice of accepting gender-related persecution as a basis for refugee status. There certainly is room for further research on the issue of this norm's effect on practice, which would involve a significant empirical study of the outcomes of gender-related persecution claims in a number of national refugee determination systems.

TASK 3: Identifying the contribution

Highlighting the contribution of the thesis is a very important part of the conclusion.

1. Read through extract B, which is part of the conclusion to a thesis in materials science and identify the parts that emphasise the contribution.
2. Underline the words and phrases that show the writer's positive evaluation of their research.
3. The conclusion to a thesis often indicates how the research can be taken farther than its immediate implications. Identify the part of this extract that performs this function.
4. The conclusion also often has a slightly more **personal** aspect than the main body of the thesis. Identify the part(s) of the conclusion that reveals the writer's personal opinions.

EXTRACT B

Conclusions And Suggestions For Future Research

This thesis has brought together several areas of materials science, and contributed to a number of contemporary subjects in the field. In particular it has attempted to broaden the understanding of conductive polymer composites by developing new techniques and discussing new materials that researchers involved in the subject may not have previously encountered.

Consequently, it is hoped that developers of conductive polymer composite devices will be able to improve products by having a better understanding of the existing materials that are used, other relevant materials that may one day be incorporated into the composites, and the behaviour of working devices with respect to their construction.

In addition, there have been significant revelations regarding CEHRTEM and the science of fullerenes, both of which are major areas of present day research...

Overall conclusions with suggestions for future work

Conclusions have already been made at the end of each chapter in this thesis. However, some summarising remarks will now be collated in order to present a clear picture of the outcome of this work...

Long-term projections

The suggestions of future work presented above were essentially small logical progressions of the work to date. There now follows a brief indication of where this research could lead if developed with a long-term view...

Final remarks

The work presented in this thesis has shown that much common ground exists between ion-irradiation studies, the nucleation of fullerenes, and the use of a CEHRTEM. It has also indicated an inescapable relevance of these three subjects to the science of conductive polymer composites.

In the current scientific climate, in which avenues of investigation become fragmented into highly specialised pockets of activity, it is very important to establish and publicise any relevant connections. It is hoped that this thesis has advocated this belief.

TASK 4: Writing about Future Research

1. Read again the following two extracts from the thesis above that deal with the future research. What signals are used to announce the future research?
2. After the future research has been announced, the first extract indicates the future achievements of this research and the second extract describes what the research will involve. Underline the verbs used in each case.
3. What do you notice about these verbs? What difference, if any, is there in the level of certainty of these two verbs?

EXTRACT A

The observations from this case study... suggest the possibility for further research examining similar processes of normative development in different international issue-areas. Examining how norms emerge in different contexts could lead to greater understanding of the genesis and effects of norms in international relations.

EXTRACT B

There certainly is room for further research on the issue of this norm's effect on practice, which would involve a significant empirical study of the outcomes of gender-related persecution claims in a number of national refugee determination systems.

TASK 5: Looking at modal forms in writing about future research.

1. Read the following extracts from successful theses, which all concern future research. Identify and underline the modal verbs.
2. Decide whether each statement is **possible, recommended or predicted under certain conditions**.
3. Compare your ideas with another student in class.
4. Now look again at the verbs you have put into the possible category. Can you make any distinction in meaning between them?
5. Again, compare your ideas with another student in class.

EXTRACT A

The results of this thesis show opportunities for future research at both the bulk protein level, and at the level of individual amino acids.

The isotopic values of modern humans in specific dietary situations should be measured. This thesis used vegan and omnivorous individuals as examples of two dietary extremes, and demonstrated substantial variation in the isotopic values of their hair keratin. Further work could extend the range of diets studied... This work would define a 'global isotopic map' to act as a frame of reference for all future interpretation of human isotopic data.

EXTRACT B

The history of subjectivity, in which Mallarme's place has been too easily seen as the 'death of the author', provides an opportunity to look again at him. Generally my findings suggest that his case might be interesting for a history of sensibility.

EXTRACT C

The last finding may be important for future studies into the attenuation of ischaemia-reperfusion injury. A better understanding of the changes during this early reperfusion stage may lead to a greater insight into the processes involved.

EXTRACT D

These differing predictions on how threat levels affect the pace of socialization suggest that a carefully designed set of case studies might help adjudicate between these models. A second test could consist in comparing the realms of state practice in which socializing pressures were felt most strongly. If convergence in military organization is more extensive than convergence in other spheres of state practice, then the competitive model of socialization would be strengthened.

Task 6: Choosing modal forms

1. Extract A is a personal comment that appears in the conclusion to the writer's thesis. It proposes a possible future action by the writer's department, rather than announcing future research.
2. Fill in the blanks with a suitable modal verb. There may be more than one possibility, but you should be able to explain and justify your choice.
3. Compare your ideas with another student in class.

EXTRACT A

When the Royal Oak pub (on the Woodstock Road) came up for sale a few years ago, several of us in the lab thought that the Department _____ bid for it. Over the last three years, many discussions have taken place there, often aided by beer and cider, and much of the most fruitful work in this thesis has stemmed from such conversations and the trust and respect built by them. While this _____ seem a slightly frivolous idea, it is far from it... Certainly this thesis _____ have been much poorer without the STM experiments going on in the Department, and I hope to continue the interaction in the future.

EXTRACT B

The present study is a relatively small scale exploratory work and therefore its findings _____ be verified and extended both by more extensive research and by work on other disciplines. Although corpus-based studies are best suited to the large scale investigation of long texts, the case-study approach to a single text _____ provide a thicker description (Geertz, 1973) which _____ well be useful in supplementing corpus-based findings. For pedagogical purposes, it _____ be useful to compare theses written by native speakers with those written by non-native speakers. Important differences have been found between research articles written by these two groups (Mauranen, 1993; Shaw, 2003), which leads to the supposition that there _____ well be interesting differences in theses as well.

MODAL VERBS**WILL: prediction**

*The reasons given for our actions **will** vary depending on who we address.*

WOULD: predicted under certain conditions

*Preferring universality to perfection, Canada concentrated on the compromises which **would** allow all the great powers to sign the UN Charter. (if the compromises were accepted)*

MAY: factual or real possibility

*It **may** require considerable courage to challenge the assumptions of the system in which one is operating.*

MIGHT: remote possibility

*His fears were that an arms race would occur, or that either side **might** launch a pre-emptive strike on the other.*

CAN: theoretical possibility

*Indeed, there will be a large step density on the surface, though this **can** vary from area to area.*

COULD: theoretical possibility

*Further development of this technique **could** provide a means of investigating this aspect in more detail.*

Remember that modal verbs have many additional meanings including those concerned with obligation, necessity and permission. An example used here is:

SHOULD: recommendation or advice

*There was much debate in Britain about whether US support **should** be welcomed.*

Task 6: Choosing modal forms**Original Versions****EXTRACT A**

When the Royal Oak pub (on the Woodstock Road) came up for sale a few years ago, several of us in the lab thought that the Department **SHOULD** bid for it. Over the last three years, many discussions have taken place there, often aided by beer and cider, and much of the most fruitful work in this thesis has stemmed from such conversations and the trust and respect built by them. While this **MAY** seem a slightly frivolous idea, it is far from it... Certainly this thesis **WOULD** have been much poorer without the STM experiments going on in the Department, and I hope to continue the interaction in the future.

EXTRACT B

The present study is a relatively small scale exploratory work and therefore its findings **SHOULD** be verified and extended both by more extensive research and by work on other disciplines. Although corpus-based studies are best suited to the large scale investigation of long texts, the case-study approach to a single text **COULD** provide a thicker description (Geertz, 1973) which **COULD** well be useful in supplementing corpus-based findings. For pedagogical purposes, it **WOULD** be useful to compare theses written by native speakers with those written by non-native speakers. Important differences have been found between research articles written by these two groups (Mauranen, 1993; Shaw, 2003), which leads to the supposition that there **MAY** well be interesting differences in theses as well.

ACADEMIC WRITING WRITING AN ABSTRACT

We can distinguish two general purposes of an abstract:

1. **to inform.** The reader will use the abstract in order to decide whether to read the whole text, or at least parts of it.
2. **to attract.** All research fields are crowded and there may be other theses in the area that the reader could decide to read instead of yours.

Masters' theses sometimes do not have an abstract. For doctoral theses there will be a word limit which you should follow. Doctoral thesis abstracts can range from about 200-500 words.

The abstract provides a summary of the thesis and often contains the following moves in this order:

1. background to the thesis
2. purpose of the thesis
3. research issues/problems/questions/hypotheses
4. method
5. results or
6. outline of argument
7. conclusions/implications
8. contribution of the thesis to the field

The amount of emphasis you put on each move will depend on how important it is within your thesis. The amount of detail you can include depends on the number of words available.

TASK 1: Abstract Structure

1. Read the two abstracts below. Abstract A comes from a master's thesis in social work; Abstract B comes from a doctoral thesis in applied linguistics.
2. Distinguish the moves given above and mark them on the text.
3. Are any moves missing? If so, which ones and how does this affect the quality of the abstract?
4. Compare your findings with a colleague in class.

ABSTRACT A

Social Workers' Perceptions of Their Work in Nursing Homes

The purpose of this qualitative study is to explore social workers' perceptions of their effectiveness in addressing the psychosocial needs of nursing home residents. Research questions involve the mission of nursing home social workers, ideal roles and actual work, and factors that influence their perceived effectiveness within a medical model of care. In-depth interviews were conducted with ten social workers at a range of facilities. They share a strong professional mission and find great satisfaction in their work with residents. Three important themes emerged from their stories: a focus on staff cooperation over conflict, an ongoing struggle between people and paperwork, and a discrepancy between their ideal roles and the daily realities of work. All informants expressed the desire for more time to personally attend to psychosocial issues; however, they believe that residents' needs are being addressed in a variety of effective ways.

(143 words)

ABSTRACT B**Original Reproductions: An Investigation of the Source Use of Postgraduate Second Language Writers**

Plagiarism is perceived as a heinous crime within the academic community, but anecdotal evidence has suggested that some writers may plagiarize without intending to transgress academic conventions. The present thesis reports a study of the writing of seventeen postgraduate students. The students were non-native speakers of English, nine of whom were working towards a master's degree and eight towards a PhD in four academic areas which correspond to the traditional categorization of science, engineering, social science and humanities. The reports of sources contained in the student-generated texts were compared to the works they cited in order to arrive at a description of the relationship between the two. In addition, interviews were conducted with the student writers and their supervisors. The student writing was found to contain textual features which could be described as plagiarism, but the writers' own accounts of their work, as well as aspects of the writing and the context in which it was produced, strongly suggest that their intention was not to plagiarize, providing empirical verification of observations of difficulty in source use among many novice academic writers. Area of academic specialization was found to play a role in source use, and overall skill at writing emerged as an even more important factor. The findings thus have implications for the areas of English for Academic Purposes, English for Specific Purposes and the teaching of academic writing as a second or foreign language. Implications of the findings are discussed, and include a strong recommendation that the focus on preventing plagiarism be shifted from *post facto* punishment to proactive teaching about source use as one component of academic literacy.

TASK 2: Evaluating Abstracts

1. Read Abstract C, which is from a doctoral thesis in the field of English literature.
2. Compare the three abstracts, A, B and C.
3. Is each abstract informative enough?
4. Is each abstract attractive enough? Would it make you want to read the thesis?
5. What impression do you gain of each thesis writer from the abstract?
6. Which one(s) do you prefer and why?
7. Discuss your ideas with a colleague in class.

ABSTRACT C**The Fictional Worlds of John Cowper Powys**

In this thesis, I argue

1. that Powys was a pluralist,
2. that Powys takes as one of his main themes an exploration of the pluralist idea that we know the world only in the form of world versions,
3. that Powys responds to the pluralist idea that pluralism is itself a world version by writing fiction which exemplifies its fictionality.

In the course of developing these arguments, I provide an original interpretation of Powys's novels which demonstrates his significance for postmodernity. (82 words)

One way of making your abstract attractive is to emphasise the contribution it makes to the field.

TASK 3: Contrasting the language of the abstract and the discussion

1. Here are some short extracts from three theses. Some extracts come from the discussion, others from the abstract.
2. Read through the extracts and decide where each comes from, **discussion** or **abstract**.
3. Underline the words and phrases that help you to decide.
4. What generalisations can you make about the language of the abstract in contrast to the language of the discussion?
5. Discuss your ideas with a colleague in class.

EXTRACT B1

A major part of this thesis has been the development of a new and 'easier to use' technique for the isolation of individual amino acids from body proteins and the subsequent measurement of their isotopic values. This technique, the first to use reversed-phase HPLC, is shown to be successful.

EXTRACT B2

The technique developed in this thesis for the isolation of single amino acids and the measurement of their isotopic values is generally easier to use than other methods... As such, the technique should be more convenient than alternative methods, and this should enable more studies of diet at the level of the individual amino acids.

EXTRACT C1

This (work) has permitted the determination of optimum microscope type and working conditions necessary for successful detection of dopant contrast. The effect of surface states and contamination on the surface condition of a specimen has been found to be significant. These experimental results have enabled a modified mechanism of the dopant contrast effect to be proposed and discussed in detail.

EXTRACT C2

The control and minimisation of this factor (the surface condition of a specimen) may turn out to be the crucial factor in allowing this technique to be widely adopted for dopant profiling. However, many questions still remain unanswered and conclusive verification of the current hypotheses regarding the mechanism that produces this phenomenon is yet to be shown.

EXTRACT C3

The advantages of this technique in terms of its ease of use, minimal specimen preparation and production of two-dimensional dopant distribution maps in a reliable and straightforward manner have been amply demonstrated in this work.

EXTRACT D1

At the intersection, then, of postmodernist feminist theory and development studies it appears that we have returned to a familiar conflict: a re-figuring of the 'postcolonial predicament'.

EXTRACT D2

I stress the relevance of such an investigation to the field of gender and development, arguing that the development 'expert', like the post-colonial feminist critic, often assigns identities to women in the South.

THE LANGUAGE OF THE THESIS ABSTRACT

- Statements about the work of the thesis itself tend to use **factive verbs** and to be **unhedged**, with **few modal verbs or negatives**.
- There is much use of **positive vocabulary** to emphasise the contribution of the thesis.

USEFUL POSITIVE PHRASES

Here are some positive phrases from abstracts.

...allows... to be successfully modelled.

...allows relevant data to be extracted.

This has permitted the determination of...

These experimental results have enabled ... to be proposed.

Further work will permit a better interpretation of ...

I draw on a wide range of sources.

I stress the relevance of such an investigation to ...

I provide an original interpretation of ...

The effect has been found to be significant.

Results are presented that show ... is a suitable alternative to ...

... demonstrates the significance of ...

This comparison reveals how x can be linked to y

It is shown that ...

This proves for the first time a long-held theory that ...

The advantages have been amply demonstrated in this work.

The advantages of this technique in terms of its ease of use ...

Further work will extend our understanding of ...

... techniques offer great potential for such analysis.

... the development of a new and easier to use technique.

This technique, the first to use... is shown to be successful.

...were successfully identified.

This study offers a new approach to ...

TASK 4: Emphasising the contribution of the thesis

1. Use the phrases above, or others of your own to make positive statements suitable for an abstract about **the contribution of your own work**.

ACADEMIC WRITING THE THESIS AND ITS ORGANISATION

TERMINOLOGY

- A **thesis** is the piece of writing submitted for a **doctorate** in the **UK**.
- A **dissertation** is usually the piece of writing submitted for a **Master's** degree in the **UK**.
- **In the US**, a **dissertation** is used for a **doctorate** and a **thesis** for a **Master's** degree.

TASK 1 Thinking about the thesis/dissertation

Note down your answers to the following questions and discuss them with another student.

1. Do you have to write a thesis or a dissertation for your course?
2. If you have to write one, how many words or pages does your text have to be?
3. What is your purpose in writing a thesis/dissertation?
4. Who do you expect to read your thesis/dissertation?
5. What is the reader's purpose and role in reading it?
6. What is your role and position in relation to your reader?

ORGANISATION OF THE THESIS

Five patterns of organisation have been found in theses.

Pattern 1

often found in: sciences, engineering

- Introduction
- Literature Review
- Methods
- Results
- Discussion
- Conclusion

Pattern 2

often found in: sciences, engineering, medicine, social sciences

- Introduction
- Literature Review
- Chapter 3, 4, 5, etc.
- Introduction
- Literature Review
- Methods
- Results
- Discussion
- Overall Discussion and Conclusion

Pattern 3

often found in: arts, humanities

- Introduction and Contextualisation of Research
- Chapter 2, 3, 4 etc.
- Analysis and Interpretation of Texts, including Comparison with Literature
- Overall Discussion and Conclusion

Pattern 4

often found in: sciences, engineering, social sciences

- Introduction and Contextualisation of Research
- Chapter 2, 3, 4 etc.
- Description and Evaluation of Algorithms, Theories, Approaches or Models, including Reference to Literature
- Overall Discussion and Conclusion

Pattern 5

often found in: social sciences

- Introduction
- Literature Review
- Chapter 3, 4, 5, etc.
- Determined by type of research, including Reference to Literature
- Overall Discussion and Conclusion

TASK 2 Thinking about your organisation

1. Discuss with another student which pattern or patterns are frequent in your discipline, which pattern you will use for your own thesis and why.

TASK 3 Distinguishing organisation type

Here are two examples of tables of contents. Each gives the structure of the thesis. Thesis 1 is an MPhil in politics and thesis 2, a DPhil in materials science.

1. Read each table of contents and decide which pattern the thesis structure most closely resembles.
2. In what ways does the thesis structure follow the pattern you chose and in what ways is it different?
3. Discuss your ideas with another student in class.

Thesis 1: Giuseppe Mazzini's Nationalism in European Context**Chapter 1: Introduction**

- 1.1: Mazzini's Life
- 1.2: Why study Mazzini's political thought?
- 1.3: Texts and contexts
- 1.4: Structure of the thesis

Chapter 2: Philosophy of History

- 2.1: Mazzini and Hegel
- 2.2: Mazzini's disagreements with Hegel and Hegelians
- 2.3: Mazzini and the French Revolution

Chapter 3: Nation and Humanity

- 3.1: Was Mazzini German or French?
- 3.2: Mazzini and Herder
- 3.3: Mazzini and Rousseau
- 3.4: Liberal nationalism
- 3.5: Humanity

Chapter 4: Nation and Individual

- 4.1: The nation and its elite
- 4.2: The tyranny of the majority?
- 4.3: Rights

Chapter 5: Conclusions

Thesis 2: SEM Characterisation of Semiconductor Dopant Distribution**Chapter 1 Introduction: A Review of Dopant Profiling Techniques**

- 1.1 General Introduction
- 1.2 Review of Dopant Profiling Techniques
- 1.3 Aims of this thesis

Chapter 2 Experimental Materials and Methods

- 2.1 Introduction
- 2.2 Sample wafer growth methods
- 2.3 Sample materials
- 2.4 Independent determination of dopant concentration
- 2.5 Quantitative analysis method employed in this thesis

Chapter 3 Determination of Specimen Preparation Procedures

- 3.1 Introduction
- 3.2 Materials and Methods
- 3.3 Results
- 3.4 Discussion
- 3.5 Conclusion

Chapter 4 Determination of Optimum Working Conditions

- 4.1 Introduction
- 4.2 Materials and Methods
- 4.3 Results
- 4.4 Discussion
- 4.5 Conclusion

Chapter 5 Effect of Material Parameters on Dopant Contrast

- 5.1 Introduction
- 5.2 Materials and Methods
- 5.3 Results
- 5.4 Discussion
- 5.5 Conclusion

Chapter 6 Application to Real Device Fabrication Issues

- 6.1 Introduction
- 6.2 Materials and Methods
- 6.3 Results from InP/InGaAsP devices
- 6.4 Discussion of results from InP/InGaAsP devices
- 6.5 Investigation of silicon MOSFETs
- 6.6 Materials and Methods
- 6.7 Results of silicon MOSFETs investigation
- 6.8 Discussion of results from silicon MOSFETs
- 6.9 Conclusion

Chapter 7 Summary of Experimental Results and Discussion of the Dopant Contrast Mechanism

- 7.1 Introduction
- 7.2 A proposed dopant contrast mechanism
- 7.3 Discussion of experimental results presented in this thesis
- 7.4 Conclusion

Chapter 8 Suggestions for Further Work

8.1 Achievements of this investigation

8.2 Outstanding issues

8.3 Conclusion

THE PARTS OF A THESIS

Some of these parts are optional and/or may not be included in dissertations. Therefore you may not need all of them for your own study.

CHECK YOUR OWN DEPARTMENTAL GUIDELINES CAREFULLY both to see what you need to include and to check the order in which the parts should appear.

Title page

Abstract

Dedication

Acknowledgements

Table of contents

List of figures

List of tables

Conventions used in the thesis

Chapters 1, 2 etc.

References

Appendices

TASK 4 Acknowledgements

1. Who should you acknowledge?
2. In what order?
3. Discuss your ideas with another student. Then compare them with the example from a DPhil thesis given below.
4. Underline all the expression of thanks. How many different ways of thanking can you find?

EXAMPLE: ACKNOWLEDGEMENT

First and foremost, I would like to thank my supervisors, AB and CD, for many hours of stimulating discussion and debate. Special thanks are also due to Dr EF whose constant advice has been so helpful over the years.

I acknowledge the support of the SERC, latterly the EPSRC, for financial support, and Professors G and H for provision of laboratory facilities. I must also give credit to IJ and Dr LM in the lab for their unflagging optimism and enthusiasm.

I must also take this opportunity to thank my friends in the department, especially the inhabitants of Room 1: O, P, Q, R, S and T, who have made my stay in Oxford such a pleasant one.

This thesis was printed with the generous assistance of UV, to whom I am extremely grateful.

Lastly I would like to thank my family, Mum, Dad and W, and my girlfriend X for being sympathetic or stern exactly when required. I could never have managed without you!

A SUGGESTED ORDER FOR ACKNOWLEDGEMENTS

1. Supervisor(s)
2. Important Professors
3. Funding bodies
4. Other people who helped in Oxford or other universities e.g. technical support
5. Your subjects, participants in the study
6. Work place help, your boss, colleagues (financial and/or moral support)
7. Friends (moral support)
8. Relations (financial and/or moral support)

TASK 5 Managing the writing task

Here are the word lengths of chapters in a thesis which follows pattern 2.

1. What do you notice about chapter length and can you suggest an explanation?
2. Why do you think the introduction is longer than the conclusion? Is this what you would expect?
3. Discuss your ideas with another student and explain the reasons for your decisions.

Number of Words	Chapter
7,312	Chapter 1 Introduction
10,238	Chapter 2
10,132	Chapter 3
11,128	Chapter 4
14,194	Chapter 5
18,165	Chapter 6
15,012	Chapter 7
5,865	Chapter 8: Conclusion
92,046	Total of words, excluding 171 references
101,541	Overall total of words

The following breakdown of chapter four with word counts shows you how long chapters can be divided into relatively short and manageable sections for the purpose of writing.

Chapter 4: Adjectives In Two Introductory *It* Patterns

4.1 Introduction and Outline of the Chapter	531
4.2 Literature Review: Introductory <i>it</i> Patterns	907
4.3 Method and Data	302
4.4 Functions of Introductory <i>it</i> Patterns	699
4.5 The <i>it</i> v-link ADJ to-inf Pattern	
4.5.1 Data on the <i>it</i> v-link ADJ to-inf Pattern	504
4.5.2 Functions of the <i>it</i> v-link ADJ to-inf Pattern	973
4.5.3 Groups of Adjectives in the <i>it</i> v-link ADJ to-inf Pattern	294
4.5.4 The <i>POSSIBLE</i> Group	
4.5.4.1 The <i>DIFFICULT</i> Subgroup	1027
4.5.4.2 The <i>EASY</i> Subgroup	702
4.5.5 The <i>NECESSARY</i> Group	518
4.5.6 The <i>USEFUL</i> Group and the <i>WRONG</i> Group	
4.5.6.1 The <i>USEFUL</i> Group	528
4.5.6.2 The <i>WRONG</i> Group	440
4.5.7 The <i>INTERESTING</i> Group	438
4.6 The <i>it</i> v-link ADJ that Pattern	
4.6.1 Data on the <i>it</i> v-link ADJ that Pattern	416
4.6.2 Functions of the <i>it</i> v-link ADJ that Pattern	342
4.6.3 Groups of Adjectives in the <i>it</i> v-link ADJ that Pattern	178
4.6.4 The <i>CLEAR</i> Group	797
4.6.5 The <i>LIKELY</i> Group	603
4.6.6 The <i>SURPRISING</i> Group	504
4.7 Summary	247

TASK 6 Approaching the writing task

1. Think again about your own thesis or dissertation.
2. Will you write parts of your thesis/dissertation throughout your degree programme, or will you leave writing until you have finished your research work?
3. In what order will you write the chapters? In particular, which type of chapter will you write first and which type will you leave until the end?
4. Will you complete each chapter before you begin another, or will you work on several different chapters at the same time?
5. Do you expect to
 - organise your writing once only at the beginning of your programme?
 - organise and re-organise your writing throughout your programme?
 - organise your writing at the beginning of your programme and re-organise it again when you have finished?
6. Discuss your ideas with another student and explain the reasons for what you think.

TASK 7 The process of writing: the outliner and the brainstormer

Read the following account of the writing process of two academics and answer the questions that follow:

My approach to writing is essentially, radically linear. I begin with a very long ‘backburning’ period during which I think but write nothing; then I make notes, not so much with Roman numerals but with clear indentations and trees to specify co-ordination and subordination of thought, of general and specific detail. This entire planning period is always directed toward an audience – the more individual the better. Like most radical outliners, by the time I generate an outline, most inappropriate or irrelevant material has been excluded; my revision processes take place both before and during this outlining stage. Once I have completed the outline, the draft is a fairly straightforward affair; I construct meaning but do not usually discover meaning. My final revision process, usually after another period of incubation, is short and limited primarily to editing concerns.

My colleague, on the other hand, is a classic brainstormer. His pre-writing period is comparatively short, and his incubation of ideas is less conscious and detailed. But he often writes three to four drafts of a single piece of writing. The first is almost always a brainstorming draft: furious writing of all his thoughts on the topic, many quick deletions and added notes. The successive drafts are carefully revised, often in pieces; additional material, sizable deletions, and a lot of reorganisation make each draft significantly different as he focuses on meeting the needs of the audience and providing detailed content. Often he writes his topic sentences only after several drafts, and usually he writes the introduction last. In fact, he revises considerably even at the final draft stage, continuing to discover and create meaning, and he is involved with the piece constantly until it is finished.

1. It is likely that **your** writing process is a mixture of the two types, that you both outline and brainstorm under different circumstances and for different purposes. However you may well find that you tend more towards one approach than the other.
2. Which approach do you prefer, or use most?
3. Are there particular circumstances when you use each approach?
4. What have you found to be the advantages or disadvantages of each approach?
5. Discuss your ideas with another student in class

It should be stressed that both approaches can work well and indeed you will probably need to use both in writing your thesis/dissertation.

TASK 8 Analysing theses/dissertations in your own field

1. Look at the table of contents for some theses/dissertations in your field.
2. Which pattern is used?
3. Make a copy of the table of contents and mark it up according to one of the organisational patterns given.
4. How far does the thesis/dissertation follow the organisational pattern and where does it differ?
5. Is this organisation suitable for your own thesis/dissertation?