

Academic English

Leuven Language Institute (ILT) - chris.bicler@kuleuven.be

ILT Writing Centre

- ▶ Free one-on-one tutoring sessions to help students with academic writing assignments.
 - ▶ Individual feedback on papers, reports, Bachelor's or Master's theses
 - ▶ Not on non-academic texts (application letters, CVs)
- ▶ Book an appointment via ILT website
 - ▶ All students allowed two appointments a year



ILT Writing Centre

- ▶ Not only for students who are struggling, good writers also welcome!
- ▶ Assistance with macro issues such as organization, focus, clarity and register
- ▶ At any stage of the writing process:
 - Narrowing down topic
 - Developing research question
 - Organizing arguments
 - Referring to literature
 - Improving academic style
- ▶ Not a proofreading service





Overview

- ▶ Useful reference material and online tools
- ▶ Academic papers (macrostructure)
 - ▶ Title
 - ▶ Abstract
 - ▶ Introduction → *Genre conventions*
 - ▶ Literature review → *Typical language and structural features*
 - ▶ Methods
 - ▶ Results
 - ▶ Discussion
- ▶ Structure and coherence (microstructure)
- ▶ Style
- ▶ Common errors → *Overview for self study and future reference*



Useful resources

Guidebooks and online tools

Reference books: academic writing

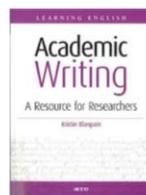
▶ Effective Writing in English

Mike Hannay & J. Lachlan Mackenzie, Coutinho



▶ Academic Writing

Kristin Blanpain, Acco



→ slides summarise most relevant guidelines

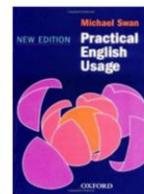


Reference books: grammar

- ▶ **Grammar in Use**
Cambridge University Press



- ▶ **Practical English Usage**
Michael Swan, Oxford University Press



Online tools: translation dictionary

► Van Dale

(<http://vowb.vandale.be.kuleuven.ezproxy.kuleuven.be/zoeken/zoeken.do>)

- ▶ Available online for KU Leuven students
- ▶ Use with care
 - ▶ Compare different translations and select the best option
 - ▶ Avoid literal, word for word translations



Online tools: translation dictionary

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(<http://vowb.vandale.be.kuleuven.ezproxy.kuleuven.be/zoeken/zoeken.do>)

- ▶ Available online for KU Leuven students
- ▶ Use with care
 - ▶ Compare different translations and select the best option
 - ▶ Avoid literal, word for word translations
 - ▶ Use other tools in combination (next slides)
 - ▶ Context-specific usage
 - ▶ How words combine with other words



Online tools: learner's dictionaries

► Longman

- Useful word combinations and phrases
- Example sentences

► Macmillan

- Useful word combinations and phrases
- Example sentences
- Word forms
- Thesaurus





experiment

From Longman Dictionary of Contemporary English

ex·per·i·ment¹ /ɪk'speriment/ ●●● **S3 W2** noun [countable]

1 a scientific test done to find out how something reacts under certain conditions, or to find out if a particular idea is true

experiment with/in/on

experiments with alcohol-fuelled cars

experiments on sleep deprivation

by experiment

Many small birds guide themselves by the stars, as has been verified by experiment.

2 a process in which you test a new idea or method to see if it is useful or effective

experiment with/in/on

an experiment in state socialism



COLLOCATIONS

VERBS

do/carry out an experiment

They carried out a series of experiments to test the theory.

He did some experiments with bats.

perform/conduct an experiment *formal* (=do an experiment)

The laboratory began conducting experiments on rats.

an experiment shows/proves/demonstrates something

His experiment showed that lightning was a kind of electricity.

The experiment proved that fabrics treated with the chemical are much less likely to catch fire.

ADJECTIVES/NOUN + EXPERIMENT

a scientific experiment

Astronauts performed scientific experiments during the flight.

animal experiments (=experiments using animals)

I think most animal experiments are cruel and unnecessary.

a laboratory experiment (=one that takes place in a laboratory)

They did a series of laboratory experiments on human sleep patterns in the 1960s.

a field experiment (=one that takes place in the real world, not in a laboratory)

In field experiments, we used patients who did not know that it was a test situation.

COMMON ERRORS

- Don't say 'make an experiment'. Say *carry out an experiment* or *do an experiment*.

Examples from the Corpus

experiment

- In the classical conditioning **experiment**, the two stimuli were presented simultaneously.
- They are doing **experiments** to learn more about the affects of alcohol on the brain.
- The Institute plans to conduct no further **experiments** on monkeys.
- Laboratory **experiments** have proven that unfamiliar surroundings and a change in daily schedule can lead to sleep problems.
- In one **experiment**, the men were not allowed to sleep and then were tested on how well they were able to concentrate.
- In three other **experiments** fluid transport in the jejunum was nil.
- All three of the **experiments** you did are related to the center of gravity in your body.
- The **experiment** has not been done, and it is hard to imagine its getting a grant.
- Faced with such a question the theorist has to repair to a mental laboratory where he conducts thought **experiments**.
- The elderly people were taught meditation in the 12-week **experiment**.

experiment with/in/on

- Airlines **experiment with** the highest possible fares over the weekend.
- Listen to all kinds of music, and **experiment with** different styles of singing.
- Becky wanted to keep her hair long but **experiment with** different styles.
- First, consider this design for a two-stage **experiment with** rats.
- This must be what people tell themselves when they start **experimenting with** drugs.
- Other areas will probably watch the outcome of this **experiment with** interest.
- This is why people find it difficult to **experiment with** their own behaviour and to practise using behaviours that are unfamiliar.



experiment - definition and synonyms ★★

NOUN Pronunciation /ɪk'speriment/

Contribute to our Open Dictionary

- 1 [COUNTABLE] a scientific test to find out what happens to someone or something in particular conditions

Experiments show that many plants tolerate a wide range of light conditions.

laboratory experiments using electric shocks

experiment on/with: a series of experiments on animals

do/carry out/conduct/perform an experiment: Researchers now need to conduct further experiments.

Synonyms and related words

Scientific research and relating to scientific research:
adjustment, anatomise, atomize...



Online tools: learner's dictionaries

► Longman

- Useful word combinations and phrases
- Example sentences

► Macmillan

- Useful word combinations and phrases
- Example sentences
- Word forms
- Thesaurus



Online tools: **collocations**

- ▶ Collocation = set of words that often occur together

e.g. *substantiate a hypothesis, body of research
play a large impact, know a decline*

- ▶ **Ozdic collocation dictionary**

- ▶ Example sentences





hypothesis - noun

ADJ.

acceptable, plausible | bold

- Scientists have proposed a bold hypothesis.

| unlikely | speculative | testable | working

- These observations appear to support our working hypothesis.

| scientific

-

VERB + HYPOTHESIS

construct, form, formulate, have, make, propose, put forward, suggest

- It is possible to make a hypothesis on the basis of this graph. A number of hypotheses have been put forward.

| consider, discuss, examine, test (out)

- using this data to test her hypothesis

| confirm, prove, support | accept | reject

- None of the hypotheses can be rejected at this stage.

VERB + HYPOTHESIS

concern sth

- Her hypothesis concerns the role of electromagnetic radiation.

| predict sth

- The hypothesis predicts that children will perform better on task A than on task B.



Online tools: **collocations**

Learning new collocations and expanding (academic) vocabulary range

- ▶ General academic vocabulary, meta-discourse
 - ▶ Phrasebank for AE:
<http://www.phrasebank.manchester.ac.uk>



[Introducing Work](#)

[Referring to Sources](#)

[Describing Methods](#)

[Reporting Results](#)

[Discussing Findings](#)

[Writing Conclusions](#)

[HOME »](#)

GENERAL LANGUAGE FUNCTIONS

[Being Critical](#)

[Being Cautious](#)

[Classifying and Listing](#)

[Compare and Contrast](#)

[Defining Terms](#)

[Describing Trends](#)

[Describing Quantities](#)

[Explaining Causality](#)

[Giving Examples](#)

[Signalling Transition](#)

[Writing about the Past](#)

ABOUT PHRASEBANK

An enhanced and expanded version of PHRASEBANK can now be downloaded in PDF:



Summarising research findings

This study has identified ...

This study has shown that ...

The research has also shown that ...

The second major finding was that ...

These experiments confirmed that ...

X made no significant difference to ...

This study has found that generally ...

The investigation of X has shown that ...

The results of this investigation show that ...

Suggesting implications for the field of knowledge

In general, therefore, it seems that ...

The results of this study indicate that ...

These findings suggest that in general ...

The findings of this study suggest that ...

Taken together, these results suggest that ...

An implication of this is the possibility that ...

The evidence from this study suggests that ...

Overall, this study strengthens the idea that ...

The current data highlight the importance of ...

The findings of this research provide insights for ...

The results of this research support the idea that ...

Online tools: **collocations**

Learning new collocations and expanding (academic) vocabulary range

- ▶ General academic vocabulary, meta-discourse
 - ▶ Phrasebank for AE:
<http://www.phrasebank.manchester.ac.uk>
- ▶ Topic-specific vocabulary
 - ▶ Scientific papers from your field
 - ▶ Highlight useful language items and words they combine with (not full sentences! = plagiarism)



Field-specific resources: collocations

Entropy is a fundamental **thermodynamic property** that has attracted attention across domains. Inference of entropy of **chemical compounds** using various approaches has been a widely studied topic. However, many aspects of entropy in chemical compounds remain unexplained. The present work proposes two new information-theoretical **molecular descriptors** for the prediction of **gas phase thermal entropy** of **organic compounds**. The descriptors reflect the bulk and size of the compounds as well as the gross topological symmetry in their structures, all of which are believed to determine entropy. A high correlation between the entropy values and information-theoretical indices has been found and the **predicted entropy values**, obtained from the corresponding statistically significant **regression model**, have been found to be within acceptable approximation. We provide additional mathematical results in the form of a theorem and proof that might further help in assessing changes in gas phase thermal entropy values with the changes in molecular structures. The proposed information-theoretical molecular descriptors, regression model and mathematical results are expected to improve predictions of gas phase thermal entropy for a large number of chemical compounds.



Topic-specific vocabulary

Field-specific resources: collocations

Entropy is a fundamental thermodynamic property that has attracted attention across domains. Inference of entropy of chemical compounds using various approaches has been a widely studied topic. However, many aspects of entropy in chemical compounds remain unexplained. The present work proposes two new information-theoretical molecular descriptors for the prediction of gas phase thermal entropy of organic compounds. The descriptors reflect the bulk and size of the compounds as well as the gross topological symmetry in their structures, all of which are believed to determine entropy. A high correlation between the entropy values and information-theoretical indices has been found and the predicted entropy values, obtained from the corresponding statistically significant regression model, have been found to be within acceptable approximation. We provide additional mathematical results in the form of a theorem and proof that might further help in assessing changes in gas phase thermal entropy values with the changes in molecular structures. The proposed information-theoretical molecular descriptors, regression model and mathematical results are expected to improve predictions of gas phase thermal entropy for a large number of chemical compounds.



General academic language

Online tools: **collocations**

To check whether a combination of words is idiomatic

► **Google**

- Search for strings (“ ... ”)
- Use wildcards (*)
- Use site-specific searches (site:uk)
- Use Google Scholar

e.g. “to refuse a hypothesis”

“to deny a hypothesis”

“to reject a hypothesis”

“to * a hypothesis”



Web Afbeeldingen Meer...

Google "to refuse a hypothesis" 

Scholar  1 resultaat (0,07 sec)

Artikelen **Tip:** alleen in het Nederlands zoeken. U kunt uw zoektaal bepalen in Instellingen voor Scholar.

Mijn bibliotheek **Renewable portfolio standards in the USA: experience and compliance with targets**
OG Bespalova - 2011 - krex.k-state.edu
Page 1. RENEWABLE PORTFOLIO STANDARDS IN THE USA: EXPERIENCE AND
COMPLIANCE WITH TARGETS by OLGA GENNADYEVNA BESPALOVA Specialist,
Astrakhan State Technical University, 2002 A THESIS ...
Geciteerd door 2 Verwante artikelen Citeren Opslaan

Elke periode Melding maken
Sinds 2016
Sinds 2015
Sinds 2012
Aangepast bereik... 

Web Afbeeldingen Meer...

Google "to deny a hypothesis"

Scholar 9 resultaten (0,08 sec)

Artikelen

Mijn bibliotheek

Elke periode
Sinds 2016
Sinds 2015
Sinds 2012
Aangepast bereik...

Sorteren op relevantie
Sorteren op datum

Het internet doorzoeken
Zoeken in pagina's in het Nederlands

inclusief patenten
 inclusief citaties
 Melding maken

A self-learning fault-diagnosis system
J Zhang, PD Roberts, JE Ellis - ... of the Institute of Measurement and ..., 1991 - tim.sagepub.com
Page 1. 29 A self-learning fault-diagnosis system by J. Zhang, BSc, Msc, PD Roberts, BEng, PhD, DSc, CEng, FIEE, FInstMC, JMIEEE, and JE Ellis, BSc, PhD, CEng, MIEE Control Engineering Centre, City University, London EC1V OHB, UK ...
Geciteerd door 15 Verwante artikelen Alle 3 versies Citeren Opslaan Meer

Recovery and growth in transition: a decade of evidence
O Havrylyshyn - IMF staff papers, 2001 - JSTOR
Page 1. IMF Staff Papers Vol. 48, Special Issue ? 2001 International Monetary Fund Recovery and Growth in Transition: A Decade of Evidence OLEH HAVRYLYSHYN[†]
This paper reviews a range of studies that examine differences ...
Geciteerd door 205 Verwante artikelen Alle 4 versies Citeren Opslaan Meer

Characteristics of the reading of a group of ninth-grade pupils
LC Hunt, WD Sheldon - The School Review, 1950 - JSTOR
... Thus, using conventional standards, we do not wish to say that good and poor readers differ in variability of performance. It is suggested that further work should lend evidence to support or to deny a hypothesis relative to variability of performance for good and poor readers. ...
Geciteerd door 11 Verwante artikelen Citeren Opslaan Meer

Statistical Number of Primary Discharges Required for Solar Array Secondary-Arc Tests
M Cho, T Kitamura, T Ose, H Masui... - Journal of Spacecraft and ..., 2009 - arc.aiaa.org
... short-circuit current of solar array strings IST = string current I1 = power supply constant current k = number of bins n = number of trials in a test P_c = confidence level P_d = defect rate P_i = probability that an event occurs in the i-th bin P_t = probability to deny a hypothesis based on t ...
Geciteerd door 6 Verwante artikelen Alle 2 versies Citeren Opslaan Meer

Web Afbeeldingen Meer...

Google "to reject a hypothesis"

Scholar Ongeveer 1.350 resultaten (0,10 sec)

Artikelen

Mijn bibliotheek

Elke periode Sinds 2016 Sinds 2015 Sinds 2012 Aangepast bereik...

Sorteren op relevante Sorteren op datum

Het internet doorzoeken Zoeken in pagina's in het Nederlands

inclusief patenten inclusief citaten Melding maken

Determination of cointegration rank in the presence of a linear trend
S.Johansen - Oxford Bulletin of Economics and Statistics, 1992 - Wiley Online Library
... 1 T., 2 C H1 T1 3 4 n H f n n H1- 1 C 4- 1 q- 1 Tp- 1 2p- 1 2P Notice that the hypotheses are no longer nested, but we number them from left to right and top to bottom and decide to **reject a hypothesis** if all hypotheses with smaller number are also rejected. ...
Geciteerd door 992 Verwante artikelen Alle 7 versies Citeren Opslaan Meer

Comparative politics and the comparative method
A Lijphart - American political science review, 1971 - Cambridge Univ Press
... The erroneous tendency to **reject a hypothesis** on the basis of a single deviant case is rare when the statistical method is used to analyze a large sample, but in the comparative analysis of a small number of cases even a single deviant finding tends to loom large. ...
Geciteerd door 2828 Verwante artikelen Alle 18 versies Citeren Opslaan Meer

Does the stock market rationally reflect fundamental values?
L.H Summers - The Journal of Finance, 1986 - Wiley Online Library
... The inability of a body of data to reject a scientific theory does not mean that the tests prove, demonstrate or even support its validity. As students of elementary statistics are constantly reminded, failure to **reject a hypothesis** is not equivalent to its acceptance. ...
Geciteerd door 1296 Verwante artikelen Alle 18 versies Citeren Opslaan Meer

The abuse of power
[JM Hoenig](#), DM Heisey - The American Statistician, 2012 - amstat.tandfonline.com
... null hypothesis of no effect is in fact false. This can be called the dilemma of the nonrejected null hypothesis: what should we do when we fail to **reject a hypothesis**? Dismally, there is a large, current literature that advocates ...
Geciteerd door 892 Verwante artikelen Alle 17 versies Citeren Opslaan Meer

Web Afbeeldingen Meer...

Google "to * a hypothesis"

Scholar Pagina 3 van ongeveer 64.100 resultaten (0,06 sec)

inclusief patenten
 inclusief citaten

Melding maken

Hypothesis testing when a nuisance parameter is present only under the alternative
[RB Davies - Biometrika, 1987 - Biometrika Trust](#)
... Upcrossing. 1. INTRODUCTION We wish to **test a hypothesis** in the presence of a nuisance parameter, δ , which enters the model only under the alternative. In other words, δ is meaningless under the null hypothesis. Traditional ...
Geciteerd door 1393 Verwante artikelen Alle 9 versies Citeren Opslaan Meer

A new model for an etiology of rheumatoid arthritis: smoking may trigger HLA-DR (shared epitope)-restricted immune reactions to autoantigens modified by ...
[L Klareskog, P Stolt, K Lundberg... - Arthritis & ..., 2006 - Wiley Online Library](#)
... negative RA. Taken together, these data permitted us to **formulate a hypothesis** on how smoking may act together with genetic factors and the immune system in being a possible causative agent for RA. SUBJECTS AND METHODS. ...
Geciteerd door 980 Verwante artikelen Alle 11 versies Citeren Opslaan Meer

"Homology" in proteins and nucleic acids: A terminology muddle and a way out of it
[E Zuckerkandl - 1987 - cell.com](#)
... the authors intent. The final case occurs most frequently and is the most subtle and therefore most troublesome. Here, similarities (called homologies) are used to **support a hypothesis** of evolutionary homology. In this case, the ...
Geciteerd door 252 Verwante artikelen Alle 10 versies Citeren Opslaan

Online tools: collocations

▶ **Just the Word**

▶ **Netspeak**

- ▶ Tools to find frequently used word combinations

e.g. *point / hypothesis*

which verbs?

which adjectives?





Enter a word or short phrase:

hypothesis

[combinations](#) [alternatives from thesaurus](#) [alternatives from learner errors](#)

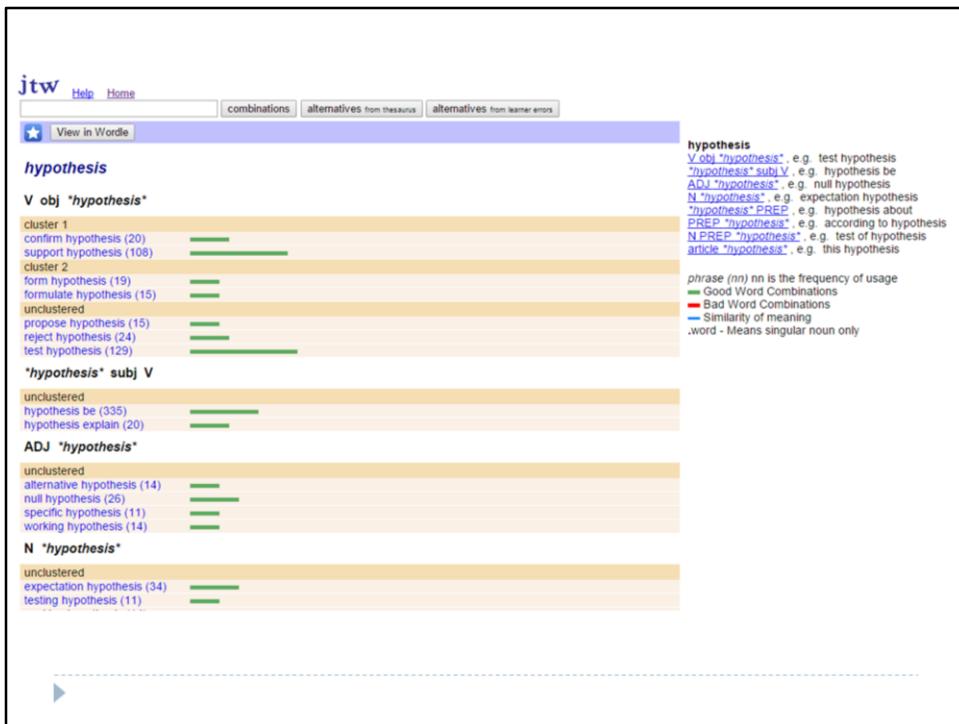
Recent searches

imperative
known
Outcome
Repercussion
technique

Popular searches

decrease
result
semiotics
alter
drop





Netspeak

One word leads to another.

i x 🔍

how to ? this
see ... works
it's [great well]
and knows #much
{ more show me }

The ? finds one word.
The ... find many words.
The [] compare options.
The # finds similar words.
The { } check the order. [»](#)



to ? a hypothesis i x 
to **test** a hypothesis 5,400 100.0% —

Suppose a researcher conducts an experiment **to test a hypothesis**. If she doubles her sample size, which of the following will increase? I. The power of the ... 

Whenever you need **to test a hypothesis**, consider using the Sample Planning Wizard. The Sample Planning Wizard is a premium tool available only to ... 

Caution: A statistical significance test is intended **to test a hypothesis**. If the hypothesis summarizes a set of data, there is no value in testing the hypothesis on ... 

Popular Pages. Statistically Significant Results - How **to Test a Hypothesis**. Follow Us. Facebook · Twitter · Google+. Navigation. Research · Academic · Write ... 

Because the whole point of doing an experiment is **to test a hypothesis**. Said another way: If you didn't have a hypothesis, you wouldn't know what experiment ... 

Survey Science: Asking Questions and Analyzing Answers **to Test a Hypothesis**. By Amy Cowen on September 23, 2015 10:45 AM. Using a survey to gather ... 

In order **to test a hypothesis** in statistics, we must perform the following steps: 1) Formulate a null hypothesis and an alternative hypothesis on population. 

It is not possible **to test a hypothesis** directly. Instead, you must turn the hypothesis into a null hypothesis. The null hypothesis is created from the hypothesis by ... 

(The word tails refers to the tail ends of the statistical distribution such as the familiar bell-shaped normal curve that is used **to test a hypothesis**. One tail ... 



Online tools: academic writing guidelines

- ▶ UEfAP

<http://www.uefap.com/>

- ▶ Purdue OWL

<http://owl.english.purdue.edu/owl/>



Online resources: pronunciation

▶ **Howjsay**

- ▶ Mainly British English, with American English alternatives
- ▶ Audio only
- ▶ Very comprehensive (also less frequent words or technical terms)



Useful for (academic) presentation > correct pronunciation of terminology

howjsay . com

hypothesis

Submit

Browse

Notes • Tools • New entries • iPhone • Android

hypothesized

Define your entry here

Translate your entry here

hypothesation

hypothesator

hypothenar

hypotenuse

hypothermal

hypothermia

hypothemic

hypothermy

hypotheses

hypothesis

hypothesise

hypothesised

hypothesiser

hypothesises

hypothesising

hypothesize

hypothesized

hypothesizer

hypothesizes

hypothesizing



Online tools: **self-study**

▶ **Scientific English Online**

- ▶ Online learning platform developed at ILT
- ▶ Exercises focusing on scientific writing
- ▶ Based on authentic examples, student assignments and common errors



KU LEUVEN

CONTACT WIE-IS-WIE ORGANIGRAM BIBLIOTHEKEN TOLEDO

Scientific English Online

log out

Scientific English Online

Grammar Vocabulary Structure

Copyright © KU Leuven | reacties op de inhoud: Marie-Anne Verdayen
Realisatie: Marie-Anne Verdayen - Geert Peeters | Laatste wijziging: 14/03/2011 | Disclaimer

Online tools: **self-study**

► **Scientific English Online**

- ▶ Grammar
 - ▶ Address common errors
 - Simple usage rules with examples
 - Exercises
 - ▶ Vocabulary
 - ▶ Expand scientific vocabulary
 - ▶ Improve formal style
 - ▶ Structure
 - ▶ Gain insight into coherence and key elements of academic papers



Online tools: **feedback**

▶ **Academic Writing Assistant**

- ▶ Trial version available via ILT website
(feedback welcome!)
- ▶ Submit your writing and receive automated feedback
 - ▶ Language (grammar, vocabulary, spelling)
 - ▶ Style
 - ▶ Structure



Interfacultair Instituut voor
Levende Talen

Text review Text enrichment

Academic Writing Assistant

Welcome to the Academic Writing Assistant, a writing tool designed to help students and researchers write academic texts. The tool comprises two components.

- Text review
- Text enrichment

This component offers advice on common language issues, coherence and cohesion, and stylistic matters. For each of these aspects, the writing tool will highlight **possible** problems in your text. As comments are generated automatically, not all the elements which are highlighted are necessarily wrong or relevant to your text. Conversely, the tool only focuses on a limited number of aspects, so some mistakes may not be indicated.

This component provides information on specific words and word combinations (e.g., to carry out / conduct research) as well as on the contexts in which they appear.

Some features of the Academic Writing Assistant still need to be fine-tuned. We therefore welcome your [feedback and suggestions](#) for improving the tool.

To get started, paste your text in the box below and click one of the buttons in the menu.

Language issues

Coherence and cohesion

Style

[SOURCES] - [HELP]

The screenshot shows the Academic Writing Assistant's user interface. At the top left is the logo of the Interfacultair Instituut voor Levende Talen. To its right is the title "Academic Writing Assistant" next to a small graphic of three colored squares (dark blue, teal, yellow). Below the title is a brief welcome message. The main content area is organized into a vertical flow of components: "Language issues" (dark blue box), "Coherence and cohesion" (teal box), and "Style" (yellow box), each connected by a downward-pointing arrow. To the right of this flow is a large light gray text input area. At the bottom left of the main content area are links for "[SOURCES]" and "[HELP]". A horizontal dashed line with a small blue arrow pointing right is located at the bottom of the main content area.

Online tools: **feedback**

▶ **Academic Writing Assistant**

- ▶ Trial version available via ILT website
(feedback welcome!)
- ▶ Submit your writing and receive automated feedback
 - ▶ Language (grammar, vocabulary, spelling)
 - ▶ Style
 - ▶ Structure
- ▶ Use as *learning tool*
 - ▶ Helps you have a critical look at your writing
 - Identifies patterns and offers tips to improve text
 - Signals *potential* problems
 - ▶ Not a guarantee for an error-free result
 - Some errors may not be identified



Interfacultair Instituut voor
Levende Talen

Language issues - common vocabulary errors

The highlighted words possibly contain a vocabulary error. Read the information provided by the tool and, if necessary, correct the mistake.

I assume that, like its predecessor, the new pronoun has developed from the noun man, partly because of its phonetic form but also as a result of the fact that it is common cross-linguistically for pronouns to develop from nouns, especially nouns that refer to person or people (Lehmann 2002: 35; Heine and Song 2011). However, it is unusual for first person singular pronouns to develop in this way. Little is known about their origins. The information that does exist, however, shows them emerging from oppositions in deictic space or social status (Heine and Song 2011: 610). The emergence of man as a pronoun with first person reference is an unexpected development and one of the aims of this paper is to explain how man can come to have this value. Section two discusses about the more general issue of how personal pronouns emerge, a further question that has rarely been addressed. Heine and Song (2011: 587) note that this is mainly because of a lack of data. They argue that new pronouns are likely to originate as a rhetorical strategy used by one individual and then adopted by others but since the individual act is no longer recoverable our ideas about the development of pronouns have to be based on hypotheses about how people interacted in the past, rather than on facts that are readily accessible to the student of language use (2011: 626). I will suggest to view the two research questions as connected, in that the use of man as a first person pronoun by young speakers in inner-city areas is a consequence of the rhetorical strategies for which they find it useful.

Since the pronoun man is a new phenomenon in present-day English, it does not occur very frequently, so the analysis presented here is still suffering from the problem of insufficient data that was regretted by Heine and Song. Although, we can document some of the facts and observe the rhetorical acts in which man occurs as a pronoun. Though the conclusions will be necessarily tentative, it is so rare to be able to document the emergence of a new pronoun that it seems worth attempting an understanding of the processes involved.

Text review Text enrichment

Language issues

Spellchecker data SCOWL

UK US

Common vocabulary errors

Common grammar errors

Tense use

Adverb position

Interfacultair Instituut voor
Levende Talen

Language issues - common grammar errors

The highlighted words possibly contain a grammar error. Read the information provided by the tool and, if necessary, correct the mistake.

Text review **Text enrichment**

Language issues

Spellchecker data SCOWL
UK US

Common vocabulary errors

Conjugation
Tense
Adverb

Although is usually not followed by a comma.

X It is true that these decision trees are accurate. Although, they often suffer from excessive complexity.
 ✓ Although it is true that these decision trees are accurate, they often suffer from excessive complexity.
 ✓ Although, as stated before, it is true that these decision trees are accurate, they often suffer from excessive complexity.
 ✓ It is true that these decision trees are accurate. However, they often suffer from excessive complexity.

Text review

Text enrichment

This part of the tool focuses on the aspects of the English tense system which are most relevant within the context of formal writing.

- Verb forms indicated in red are probably incorrect.
- The past and present perfect are frequently confused. [Click here](#) for more information.

Past versus present perfect

- The **past tense** is used to refer to something that happened at a specific moment in the (distant or recent) past. Definite time locations, such as *in 2005*, *last year* or *yesterday*, are signals that the past tense should be used.

Last year, they **extended** the experiment to the entire country.

- The **present perfect** is used to refer to events or activities that took place in the past but are still connected with the present. Indications of time **up to now**, such as *already*, *so far* and *in the last five years*, are signals that the present perfect tense should be used.

Over the last few years, we **have set forth** many initiatives.

- Progressive forms are often overused. [Click here](#) for more information.

Language issues

- Spelchecker data SCOWL
- UK** **US**
- Common vocabulary errors
- Common grammar errors
- Tense use
- Adverb position



Coherence and cohesion



I assume that, like its predecessor, the new pronoun **has developed** from the noun *man*, partly because of its phonetic form but also as a result of the fact that it is common cross-linguistically for pronouns to develop from nouns, especially nouns that refer to person or people (Lehmann 2002: 35; Heine and Song 2011). However, it is unusual for first person singular pronouns to develop in this way. Little is known about their origins. The information that does exist, however, shows them emerging from oppositions in deictic space or social status (Heine and Song 2011: 610). The emergence of *man* as a pronoun with first person reference is an unexpected development and one of the aims of this paper is to explain how man can come to have this value. Section two discusses about the more general issue of how personal pronouns emerge, a further question that **has rarely been addressed**. Heine and Song (2011: 587) note that this is mainly because of a lack of data. They argue that new pronouns are likely to originate as a rhetorical strategy **used** by one individual and then **adopted** by others but since the individual act is no longer recoverable our ideas about the development of pronouns **have to be based** on hypotheses about how people interacted in the past, rather than on facts that are readily accessible to the student of language use (2011: 626). I will suggest to view the two research questions as connected, in that the use of *man* as a first person pronoun by young speakers in inner-city areas is a consequence of the rhetorical strategies for which they find it useful.

Since the pronoun *man* is a new phenomenon in present-day English, it does not occur very frequently, so the analysis **presented** here is still suffering from the problem of insufficient data that was regretted by Heine and Song. Although, we can document some of the facts and observe the rhetorical acts in which *man* occurs as a pronoun. Though the conclusions will be necessarily tentative, it is so rare to be able to document the emergence of a new pronoun that it seems worth attempting an understanding of the processes **involved**.

- Coherence and cohesion**
- Sentence length
- Paragraph length
- Reference
- Linking words and phrases
- Repeated words
- Recurring patterns

▼

Relative clauses
We also conducted tests for possible non-response bias. The details of these tests are summarised in Appendix 1.
→ We also conducted tests for possible non-response bias, [the details of which](#) are summarised in Appendix 1.

Participle clauses
Items which were highly skewed were eliminated. This resulted in the removal of around half of the items.
→ Items which were highly skewed were eliminated, [resulting](#) in the removal of around half of the items

Linking words
Participants in the treatment tended to agree with this statement. Participants in the control condition were more likely to disagree.
→ Participants in the treatment tended to agree with this statement, [whereas](#) participants in the control condition were more likely to disagree.

Texts with an average sentence length of more than 25 words are often **difficult** to read.
All sentences longer than 30 words have been indicated in [this colour](#). Check whether it would not be better to split or shorten the sentence.

Sentence length in quotations should of course not be adapted.

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[SOURCES]
[HELP]
[GIVE FEEDBACK]

Coherence and cohesion - Paragraph length

Text review Text enrichment

Language issues



Coherence and cohesion

Sentence length

Paragraph length

Reference

Linking words and phrases

Repeated words

Recurring patterns



The average number of sentences per paragraph is 6.



The average paragraph length is strongly related to the text genre. Newspaper articles, for instance, will have shorter paragraphs than academic texts.

The average paragraph length in academic texts is 5 to 10 sentences.

- Paragraphs shorter than 3 sentences have been indicated in [this colour](#). Try to integrate these into another paragraph. Keep in mind that a paragraph should always have one central idea.
- Paragraphs longer than 12 sentences have been indicated in [this colour](#). Try to divide these into shorter paragraphs.

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Coherence and cohesion - Reference

Text review Text enrichment

Language issues



Coherence and cohesion

Sentence length
Paragraph length
Reference
Linking words and phrases
Repeated words

You can use various word classes to refer to elements in your text. The most important ones are mentioned here.

- Personal, reflexive and possessive pronouns (e.g., *it*, *itself* and *its*). Click [here](#) for more information.
- Demonstrative pronouns or adjectives (*this*, *that*, *these* and *those*). Click [here](#) to see an example.
- Relative pronouns (*that*, *which*, *who(m)* and *whose*). Click [here](#) for more information.

The highlighted words in your text might contain a mistake. Read the information provided by the tool and, if necessary, correct the error.

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Coherence and cohesion - Linking words and phrases

Text review Text enrichment

Language issues



Coherence and cohesion

Sentence length

Paragraph length

Reference

Linking words and phrases

Repeated words

Recurring patterns



Linking words and phrases, such as *moreover* and *on the contrary*, help the reader understand the logical connections between sentences and paragraphs. Although these linking devices are **necessary** in any text, you should always make sure not to **overuse** the same words or structures.

- Do not use **too many** sentence-initial linking words or phrases in a row, since this gives your text a predictable and monotonous rhythm. Most sentence-initial connectives can also be used in the middle and/or at the end of the sentence. Overuse of sentence-initial linking words or phrases in your text is indicated in **this colour**.
- Make sure you do not use the **same connectives** too often. Each logical connection can be expressed by various linking words or phrases. Unnecessary repetition of linking words or phrases in your text is indicated in **this colour**.

For more information and examples, [click here](#).

I assume that, like its predecessor, the new pronoun has developed from the noun *man*, partly because of its phonetic form but also as a result of the fact that it is common cross-linguistically for pronouns to develop from nouns, especially nouns that refer to person or people (Lehmann 2002: 35; Heine and Song 2011). **However**, it is unusual for first person singular pronouns to develop in this way. Little is known about their origins. The information that does exist, **however**, shows them emerging from oppositions in deictic space or social status (Heine and Song 2011: 610). The emergence of *man* as a pronoun with first person reference is an unexpected development and one of the aims of this paper is to explain how man can come to have this values. Section two discusses about the more general issue of how personal pronouns emerge, a further question that has rarely been addressed. Heine and Song (2011: 587) note that this is mainly because of a lack of data. They argue that new pronouns are likely to originate as a rhetorical strategy used by one individual and then adopted by others but since the individual act is no longer recoverable our ideas about the development of pronouns have to be based on hypotheses about how people interacted in the past, rather than on facts that are readily accessible to the student of language use (2011: 626). I will suggest to view the two research questions as connected, in that the use of *man* as a first person pronoun by young speakers in inner-city areas is a consequence of the rhetorical strategies for which they find it useful.

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Coherence and cohesion

Style

Personal language use

Informal and subjective words

Some strategies to make your writing more impersonal are listed below. Try not to overuse one specific strategy, but rather to vary the constructions as much as possible.

- **Passive voice.** Click [here](#) to see an example.
- **Constructions with *it*, such as *it is important to*, *it is true that* and *it could be argued that*.** Click [here](#) to see an example.
- **Adverbs (such as *unfortunately* or *remarkably*) or adjectives (such as *regrettable* or *useful*) expressing attitude.** Click [here](#) to see examples.
- **Starting your sentence with **this paper**, **chapter 2**, and so on.** Click [here](#) for more information.
- **One.** Click [here](#) for more information.

[SOURCES] - [HELP] - [GIVE FEEDBACK]

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Style - Informal and subjective words

Text review Text enrichment

The terms that have been indicated in your text are rather **informal** or **subjective**. Subjective terms are terms which reveal the author's opinion on what is stated (e.g. Manipulating information from one format to another is **tedious**).

Language issues

Coherence and cohesion

Style

Personal language use

Informal and subjective words

With fossils it is very easy to date formations. This dating cannot be used as absolute dating but as a relative dating. Those datings are very useful for making a chronostratigraphy. (Geologica) Not everything is certain about this. **There's** a range of uncertainty around those datings. **Also** the dating methods used, are not the most precise methods and gives a greater uncertainty. (Pol & Norell) By radiometric dating and biostratigraphical correlations they can date absolute and more accurate. (Zhou and others) Those dates are just hypotheses, also the phylogenetic tree, and the age of origination of taxa are used for these. These hypotheses gives a great help to construct evolutionary theories or hypotheses. (Pol & Norell) The sequence of a fossil record is very useful to the evolution of a species. Some examples like the ammonoids or trilobites have some beautiful sequences in the fossil record. Other things that can be seen in a fossil records are things like major events. (Geologica) But when making a phylogenetic tree and Comparing different fossil records can give some difficulties to reconstruct the paleo ecosystem. A very well known example is the question if dinosaurs had feathers, and that they relate to birds. (Zhou and others) The fossil record provides a powerful basis for analyzing the controlling factors and impact of biological evolution over a wide range of temporal and spatial scales and in the context of an evolving Earth. (Jablonski) This shows that fossil records are very useful in different branches of science but that comparing them gives **a lot of** difficult other problems. Its also very important that the fossil record preserved very well. How better the conservation of the fossil record, how more useful and accurate the record can be used for interpretation, hypotheses and theories in biology or geology. (Zhou and others) The problem with the fossil record occurs when you go to an very early stage in life. Precambrian life forms are difficult to find and therefore makes it not easy to give much information for biological research. (Moody) There is not only a use for macrofossils, also microfossils like zooplankton and benthics reveal **a lot of** information about things like paleoclimate, the dynamics, the paleoecosystem. The things like acidity and salinity can also be found out of the microfossils. Not only hypotheses of the past can be made by all these things, also they try, by reconstruct the past, to predict future of changes in structures and dynamics of places similar to the paleoenvironment. (Jeppesen) The species interactions can also be extrapolated of the fossil record. When even the DNA is preserved very well there can be and gene-centered view of the evolution. Things like mitochondria and origin of eukaryotic cells can be found by this. (Thompson) Also the global and temporal distribution and occurrence of fossils can say a lot about paleoclimates, paleogeography, paleoecosystems and extinctions. (Archibald) A very important interrelation that can be used in almost every thing we have spoken of, is the relation between animal and sediment. Things like bioturbation, bioerosion and biogenic sedimentary structures can be used by **a lot of** scientist like biologists, paleontologists, sedimentologists, stratigraphers. **A lot of** problems can be solved by trace fossils. Interpretations of trace fossils can be made about functionality, sedimentology and morphological features. Sometimes ichnological features can also be very useful in a interpretation or hypotheses. (Bromley) many important things cannot be seen in the fossil record, **a lot of** information stays unrevealed in this way. **Also** the fossil record contains only the species who preserved good, because of this there an uneven preservation. **But** fossils stay the most important for reconstruct the environment and paleoclimates

[SOURCES] - [HELP]

Find alternatives

Text review **Text enrichment**

This part of the tool offers alternatives for words used in your text. To see these alternatives, make sure your text is pasted in the box below.
Source of data: the [Louvain English for Academic Purposes dictionary](#) (S. Granger & M. Paquot)

Function	Words/expressions used in your text	For alternatives
DESCRIBE		
Introduce a topic: Introduce the main topic	issue [1], question [1], and [7], further [1], as [6], common [1], like [1].	click here click here click here
Find alternatives		
Find information		
REFER AND REPORT		
Quoting and reporting	argue [1], assume [1], explain [1], find [1], note [1], observe [1], view [1].	click here
GIVE VALOUR		
Express possibility and certainty	can [2], likely [1], necessarily [1], suggest [1].	click here
PERS. OPINION		
Expressing personal opinion	worth [1].	click here
LINK IDEAS		
List and sequence: introducing the first item	first [3].	click here
List and sequence: introducing the second and following items	then [1].	click here
Express cause and effect: Cause	for [3], because of [2], because [2], since [1].	click here
Express cause and effect: Effect	so [2], as a result of [1], as a result [1], consequence [1], result [1].	click here

Function	Words/expressions used in your text	For alternatives
DESCRIBE Find alternatives	Introduce a topic: Introduce the main topic issue [1] , question [1] .	click here aim concern consider discuss emphasis examine focus issue objective purpose question subject talk theme topic For more information on these words/expressions, click here
Find information	Add information and [7] , further [1] .	click here and another besides besides further furthermore in addition in addition to moreover next other

Add information

word/expression	Definition
and another	<p>1. [ADD INFORMATION] You can use the determiners <i>another</i> and <i>other</i> to introduce an additional item.</p> <ul style="list-style-type: none">• <i>It is important to get your performers to keep the microphone as still as possible. Another point for them to remember is not to speak directly at the microphone but to aim instead just over the top of it.</i>• <i>One type of skin cancer is caused when skin that is not used to the sun is exposed to short bursts of strong sunlight. Other types of skin cancer are associated with continued exposure to the sun over a long period.</i> <p>2. [CHANGE TOPIC] The determiner <i>another</i> is often used with nouns such as <i>subject</i>, <i>question</i>, <i>issue</i> and <i>point</i> to change topic:</p> <ul style="list-style-type: none">• <i>Exercise is another subject which should also be considered.</i>
besides	<p>The preposition <i>besides</i> can be used to add new information but it is less frequent than <i>in addition to</i> in academic writing and professional reports:</p> <p><i>Premature infants often have other common complicating conditions besides heart disease.</i></p> <p><i>Besides contributing to heart disease, diabetes can also increase the risks of developing kidney problems or blindness.</i></p>
besides	<p><i>Besides</i> introduces a final point or argument, especially one which is decisive. Its most typical position is at the beginning of the sentence, followed by a comma:</p> <p><i>Even taped interviews can only be read with caution, since they may have been edited, and the reader will not be told how. Besides, it is an everyday experience that people are sometimes wrong in conversation, and may not remember events well.</i></p>
further	<p>1. [ADD INFORMATION] You can use the adjective <i>further</i> to introduce an additional item:</p> <p><i>Further research is needed.</i></p> <p>Note that you can also use <i>further</i> as an adverb, found mainly inside the sentence:</p>





Academic writing

Genre analysis and useful guidelines

Research papers: genre analysis



Academic writing

- ▶ Not just correct grammar and word choice
- ▶ Specific genre conventions
 - ▶ Analyse examples
 - ▶ To identify relevant structural, stylistic and language features
 - ▶ Useful strategy to improve the quality of your writing
 - ▶ General guidelines, not absolute rules
 - ▶ Apply what is relevant for a specific course assignment, academic paper, MA thesis (in consultation with supervisor)



Step 1: Planning



- ▶ To **select** information and **organise** your ideas
 - ▶ Prepare a schematic overview
 - ▶ Reorganise if necessary
 - ▶ Include typical structural elements of academic papers
- ▶

Which ideas to include
How they relate (logical links)
How to order them

In general

Contents and structure

- ▶ Careful selection of information
 - ▶ Well-constructed paragraphs
 - ▶ Clear focus
 - ▶ Logically organised
- be reader-oriented



Selection of information

According to projections by the United Nations, 60% of the world's population will reside in urban areas by 2030. Studies of the ecology of cities and ecology *in* cities will therefore assume increasing relevance as urban communities seek to protect and/or enhance their ecological resources. Presently, the most serious threats to wildlife include the degradation and/or loss of habitats, the introduction and spread of problem species, water pollution and the encroachment of inappropriate development. Climate change could add to these problems through competition from exotic species, the spread of disease and pests, increased summer drought stress for wetlands and woodland, and sea-level rise threatening rare coastal habitats. Earlier springs, longer frost-free seasons, and reduced snowfall could further affect the dates of egg-laying, as well as the emergence, first flowering and health of leafing or flowering plants. Small birds and naturalized species could thrive in the warmer winters associated with the combined effect of regional climate change and enhanced urban heat island. This article reviews the range of climate-related threats to biodiversity in the aquatic, inter-tidal and terrestrial habitats of urban areas. London is used as a case study to illustrate potential impacts, and to contend that 'green spaces' in cities could be used by planners to counter climate-related threats.



Too many lists > lacks focus, relevance not clear

Selection of information

Water pollution is a serious problem for the entire world. It threatens the health and well being of humans, plants, and animals. As the world became more industrial and smaller due to communications and trade, accidental and purposive hazardous dumping have contributed to the problem of sea pollution. All water pollution is dangerous to the health of living organisms, but sea and river pollution can be especially detrimental to the health of humans and animals. Rivers and seas are used as primary sources of potable water by populations all over the world. Another serious consequence of this pollution is the effect of this pollution on trade in the polluted areas. This paper examines cases which reflect different causes of sea and river pollution, the seriousness of this pollution, the effect of this pollution on trade, and a possible global solution to this problem.



Equally difficult to assess relevance of the study

Too much general contextual information which is commonly known

Likely to be discarded by specialists

Genre analysis: Abstracts / Research papers

- ▶ Example (abstract)
 - ▶ Which typical structural elements of academic papers can be identified?



Background – Limitations – Methods – Results – Conclusions

Global warming is a **key threat** to biodiversity, **but few researchers** have assessed the magnitude of this threat at the global scale. We **used** major vegetation types (biomes) as proxies for natural habitats and **calculated** changes in habitat areas and associated extinctions of endemic plant and vertebrate species in biodiversity hotspots. Because of numerous uncertainties in this approach, we **undertook** a sensitivity analysis of multiple factors. In addition, average required migration rates **were calculated** for each hotspot assuming a doubled-CO₂ climate in 100 years. Projected percent extinctions **ranged from** <1 to 43% of the endemic biota (average 11.6%), with biome specificity having **the greatest influence** on the estimates. Bootstrap comparisons indicated that effects on hotspots as a group **were not significantly different** from effects on random same-biome collections of grid cells with respect to biome change or migration rates. In some scenarios, however, hotspots **exhibited relatively high** biome change and low migration rates. Especially vulnerable hotspots were the Cape Floristic Region, Caribbean, Indo-Burma, Mediterranean Basin, Southwest Australia, and Tropical Andes, where plant extinctions per hotspot sometimes **exceeded** 2000 species. Global-warming-induced rates of species extinctions in tropical hotspots **are expected to** in some cases exceed those due to deforestation, supporting suggestions that global warming is **one of the most serious threats to the planet's biodiversity**.



Overview of typical elements of MA thesis

- ▶ Title
- ▶ Abstract
- ▶ Table of contents
- ▶ Lists
- ▶ Corpus:
 - ▶ Introduction
 - ▶ Literature review
 - ▶ Methods
 - ▶ Results
 - ▶ Discussion
 - ▶ Conclusions
- ▶ References
- ▶ Appendices

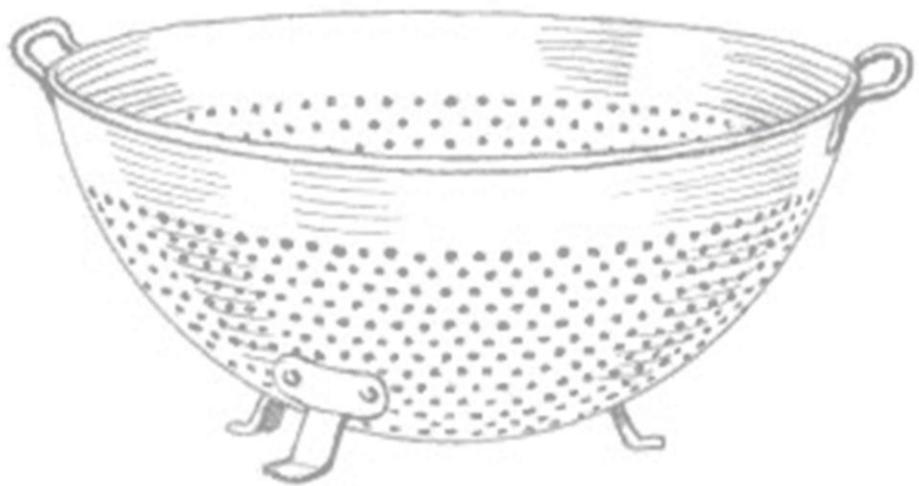
Not necessarily written in this order!

- Methods often easiest to describe
→ Can be good way to get started
- Introduction / abstract
→ Often written last



Non-textual elements

- ▶ **Table of contents**
 - ▶ Best compiled when completely finished
 - ▶ Try to formulate titles according to the same format (parallelism)
 - ▶ Avoid too many sublevels / too much indentation
 - ▶ Check that no sections are missing
- ▶ **Lists**
 - ▶ Tables, figures, graphs, symbols, abbreviations
- ▶ **Appendices**
 - ▶ Essential information that would make the text too heavy
- ▶ **References**
 - ▶ Be consistent
- ▶



ABSTRACT

Abstracts

- ▶ Short version of paper/thesis
 - ▶ ≠ an introduction
- ▶ All/some of the following stages (sometimes clearly labelled)
 - ▶ Background (research gap)
 - ▶ Objectives
 - ▶ Methods
 - ▶ Results
 - ▶ Conclusions



Abstracts

- ▶ Should function as stand-alone text
 - ▶ No references to tables/figures
 - ▶ Clear and accessible language
- ▶ To be made available in LIMO





Introduction

- ▶ Relevant context
 - ▶ Importance of topic
 - ▶ Link with previous studies / the field in general
 - ▶ Gaps / limitations in existing research

Entropy is a **fundamental thermodynamic property** that has **attracted attention** across domains. Inference of entropy of chemical compounds using various approaches has been a **widely studied topic**. However, many aspects of entropy in chemical compounds **remain unexplained**.

Organic thin-film transistors are **considered indispensable** in applications requiring flexibility, low processing temperature, and low cost. **Key challenges to be addressed** include developing solution-processable gate dielectric materials that form uniform films over large areas.

Methods used previously to deposit materials within the pores of such membranes include electrochemical deposition and *in situ* polymerization. This paper describes **the first use of sol-gel chemistry** to prepare semiconductor nanofibrils and tubules within the pores of an alumina template membrane.

Gradisar et al. recently presented a novel self-assembly strategy for polypeptide nanostructure design that could lead to **significant developments** in biotechnology. In the present paper, the underlying mathematical model is developed.



Introduction

- ▶ Relevant context
 - ▶ Importance of topic
 - ▶ Link with previous studies / the field in general
 - ▶ Gaps / limitations in existing research
- ▶ Objectives / hypotheses



However, this is practically impossible due to the high resolution and adaptive grid refinement. Therefore, this paper proposes an asymptotic coupling concept.

The objective of this study is to present specific theoretical and empirical mathematical models applied to the dissolution of carbonates in acidic environments.



Introduction

Other possible elements

- ▶ Justification
- ▶ Theoretical concepts
- ▶ Structure (especially if not IMRAD)

Chapter one reviews...

The second section homes in on ...



LITERATURE REVIEW



Literature review

- ▶ Provides an overview of the literature available
 - ▶ Gives the reader an idea of the current “state of knowledge”
- ▶ Shows how your work fits in with earlier studies and the field in general
 - ▶ Shows that there is a need for your research
- ▶ Offers a better understanding of your research questions and hypotheses
 - ▶ Serves as a basis for methodology
 - ▶ Gives an indication of results to expect



Or even a separate review article

Literature review

- ▶ Integrating work done by others
↔ challenging to write
 - ▶ Searching > reading > selecting > planning > writing
- ▶ Not just other researchers' ideas
→ you make important contribution as well
 - ▶ Selection of sources
 - ▶ Structure (connections and common patterns)
 - ▶ Evaluation (strengths, weaknesses)



Literature review

- ▶ **Careful selection**
 - ▶ Which sources are influential within the field?
 - ▶ What are the key ideas within each source?
 - ▶ Which key ideas are most relevant to your topic?
- ▶ **Identification of common patterns, themes**
 - ▶ General observations / connections between different studies
- ▶ **Critical approach**
 - ▶ Strengths and weaknesses in existing research



Literature review

- ▶ Not just a list, but an organised overview of the literature
- ▶ Avoid summarizing articles or presenting researchers one by one
- ▶ Organise information **thematically**
 - shows you understand how the studies relate to each other
 - shows you have made the information your own
- ▶ **Chronological** organisation often less effective
 - unless describing evolution of approach or methodology





METHODS

Methods

- ▶ Describe methodology, materials, procedures
 - ▶ Often written first (less challenging)
- ▶ Varying degree of specificity (field-dependent)
 - ▶ Standardised methods: brief reference sufficient
 - ▶ Original approach: explicit, step-by-step description and justification

Epitopes were selected from sequences at both C- and N-termini based on the three-dimensional structure of the T3 peptide. The assay was simplified by attaching magnetic beads to the anti-T3 antibody.



Annual trends were determined by entering education level, age, and the year of survey as independent variables into the logistic regression and general linear models, with smoking status and quantity of cigarettes consumed as dependent variables, respectively. The regression coefficient and standard error of the year of survey term were used to calculate the slope estimate. The slope estimate was considered statistically significant if the 95% confidence interval surrounding it excluded zero. An interaction term was entered into these models and the type III sums of squares were used to evaluate whether trends differed by education group.

In the combined country analyses, current smoking rates and quantity of cigarettes consumed were calculated for each education group. These rates were age adjusted according to the direct method, using the age distribution of the European population as the standard. All further analyses were adjusted for age, which was entered as a continuous covariate into the models. Differences in smoking prevalence or cigarette consumption between education groups were determined by the Tukey test.



Standardised methods

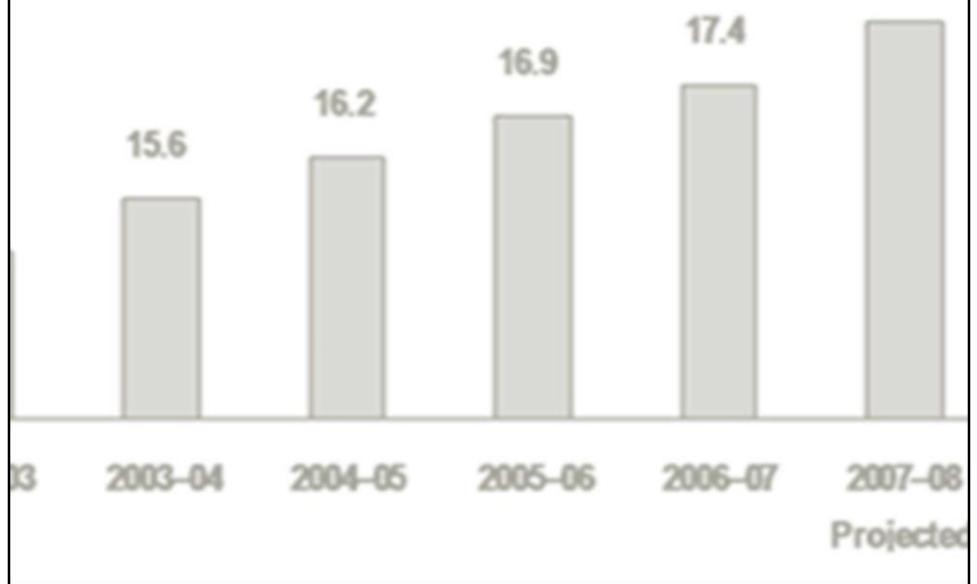
Mean monthly climatic data (precipitation, relative humidity, and environmental temperature) were obtained using the Meteotest Meteonorm V.4.0 CD ROM, a meteorological computer program that contains reliable 30 year averages for several hundred weather stations globally. Weather stations were selected carefully on the basis that they were most climatically representative of a given country with regard to respective population dispersals. After extensive discussions with meteorologists, the weather stations used were often those found in a country's capital city, as these captured, for most cases, the largest share of the country's population. However, for those countries with particularly dispersed populations and discernible climatic variations (Italy, France), a north-south gradient was used, that is, the average of two weather stations – each climatically representative and with high population densities – was used.

Longitudinal datasets on macroeconomic indicators were obtained from the United Nations Statistics Division and the World Bank. Time series datasets were also obtained from the World Bank regarding lifestyle risk factors such as smoking and obesity, and on health service provision. Data on four socioeconomic variables were calculated using the European Community Household Panel longitudinal users' database covering the four years 1994–97; this survey is the first comparable, cross country database on social indicators in the EU. As it only started in 1994, there are no cross country data available in Europe regarding such socioeconomic indicators prior to this year.



Methods + justification

RESULTS



Results

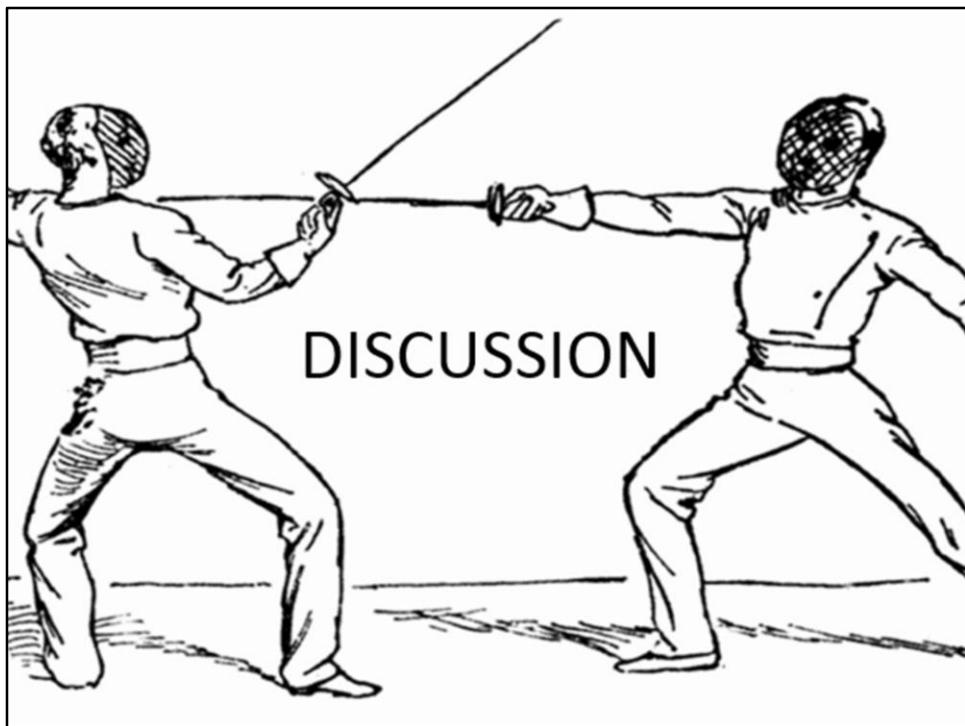
- ▶ Describe findings of study
 - ▶ Graphs, figures and tables to help visualise data
 - ▶ Complete overview
 - ▶ Textual support
 - ▶ Summary of most important findings
 - ▶ Interpretation / explanation of results
 - ▶ Difficulties in interpretation

The composition of amino acid pairs indicates that there are remarkable differences among four functional groups of SRPs.

Bundles of these fibrils were also found to be single crystalline, suggesting that the individual fibrils are arranged in a highly organized fashion within the bundle.

The computed results show that the present scheme is a successful numerical technique for solving the MRLW equation.





Discussion / Conclusions

Your findings / hypotheses (no new ideas, questions)

- ▶ Relation to existing research (confirm / contradict)
- ▶ Relevance / implications
(research methodology, industrial applications, society in general)
- ▶ Limitations → suggestions for future research



Thus, the model could aid in better understanding caspase activation and identifying therapeutic approaches promoting or retarding apoptotic cell death.

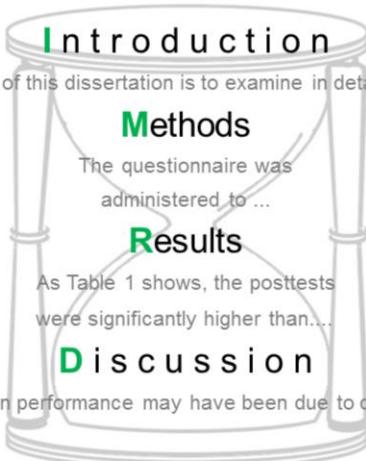
Consequently, this work establishes a promising basis for future optimization strategies.

This relatively simple method of graphene integration will be easily adoptable in the industrialization of graphene-based devices.

Further studies are needed to determine the ability of cells to recover from repeated exposure.



IMRaD structure

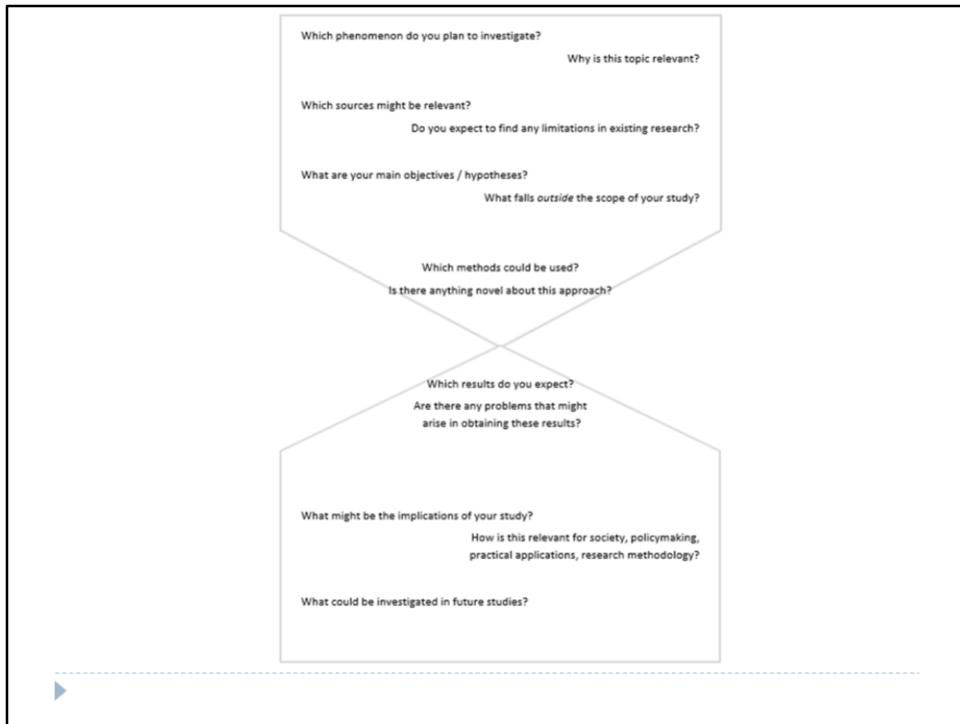


Pre-writing outline

► Planning your text

- Key step in writing process
- To select information and organise your ideas
- Handout = pre-writing outline for writing research papers





Pre-writing outline for writing research papers > useful questions to think about *before* you start writing > to organise your ideas and select information
 (not all questions might be equally relevant or essential, depending on your topic and objectives, but helpful to give all these aspects some consideration in order to make the best possible selection before you start writing)

Pre-writing outline

- ▶ **Planning your text**
 - ▶ Key step in writing process
 - ▶ To select information and organise your ideas
 - ▶ Handout = pre-writing outline for writing research papers
- ▶ **Try to answer (some of) the questions on the handout**
 - ▶ Any questions you're unable to answer at this stage?
 - ▶ Decide which questions are most relevant for your topic



An average master's thesis contains...

- ▶ 20-30% Introduction
- ▶ 10-20% Methods and Materials
- ▶ 35-45% Results
- ▶ 20-25% Discussion + Conclusion



Step 2: Writing

- ▶ Typical language and stylistic features
- ▶ Strategies to improve coherence and flow
 - ▶ General guidelines
 - ▶ Tips for specific sections of the thesis



In general

- ▶ Clear and accessible language
- ▶ Formal style
- ▶ Impersonal constructions
- ▶ Tense usage



Clear and accessible language

- ▶ Topic-specific vocabulary / terminology
 - ▶ Identify useful *collocations* in papers from the same domain
 - ▶ Not necessary to explain
 - ▶ Abbreviations? → only explain when used for the first time
 - ▶ Structuring phrases / general academic language
 - ▶ To establish context, relevance, logical relations, focus
 - ▶ Use Academic Phrasebank, Ozdic, Google strategy
- be reader-oriented



Clear, accessible language?

We describe a mathematical model of the coupled fluid mechanics and gas-phase chemical kinetics in a rotating disk chemical vapor deposition reactor. The analysis is for the flow between an infinite radius, heated nonporous rotating disk and a parallel infinite radius porous surface through which reactive fluid is injected normal to the disk. The analysis extends the usual von Karman transformation to allow specification of the normal velocity at the porous disk, and reduces to a stagnation point flow in the limit of zero rotating rate. The deposition of silicon from silane is used as an example system. A new reaction mechanism and set of rate constants are given for the thermal decomposition of silane. We present an RRKM analysis of several of the unimolecular reactions in the mechanism. Calculated velocity and temperature profiles, chemical species density profiles, and deposition rates as functions of susceptor temperature, spin rate, and inlet flow velocity are presented.



Very limited use of general academic language / no structuring phrases > isolated sentences, relevance not clear

Clear, accessible language?

In animals, maternally-derived gene products control early embryonic development prior to the activation of the zygotic genome. However, it has been unclear whether a prolonged period of maternal control also occurs in plant embryos. To investigate this issue directly, we crossed different *Arabidopsis thaliana* accessions and performed transcriptome profiling on hybrid embryos at the 1-cell/2-cell, 8-cell and ~32-cell stages using mRNA-Seq. Single-nucleotide polymorphisms within the mRNA-Seq tags revealed maternal and paternal genome contributions to more than 7000 transcripts. For the vast majority of genes, the maternally and paternally derived loci contributed approximately equal amounts of transcripts - even in the 1-cell/2-cell stages. Thus in contrast to previously proposed models, our results indicate that both parental genomes are active very early during *Arabidopsis* embryogenesis. Although most transcripts were biallelic, we identified >100 transcripts that were derived predominantly or exclusively from the maternal locus and >100 transcripts derived predominantly or exclusively from the paternal locus. These parent-of-origin-dependent transcripts encode proteins with annotated functions including transcriptional regulation, RNA binding, chromatin remodeling, signal transduction and hormone metabolism. We are currently testing whether these transcripts are inherited or derived from imprinted loci. Since only a few examples of inherited transcripts or gene imprinting in plant embryos have been reported, our identification of hundreds of parent-of-origin-dependent transcripts suggests that one or both of these mechanisms play an important role in shaping the early embryonic transcriptome.



Some general academic language / structuring phrases > essential to make sense
Find a balance > be reader-oriented

Formality

Academic writing is characterised by a formal style:

- ▶ Formal vocabulary
- ▶ Formal grammar



Formal vocabulary

- ▶ Basic, everyday words can often be replaced by more formal equivalents.

A lot of articles have been published. → *many, numerous articles*
The results have been pretty good → *have been quite promising*
His claims appeared a little bit biased. → *appeared slightly biased*
The results were kind of disappointing. → *were rather disappointing*

- ▶ Often words with a Latinate origin can be used as an alternative
- ▶ Pay attention to typical collocations
- ▶ Avoid unnecessarily formal words, literary expressions, metaphores (e.g. a *plethora of*)

Little research has been done to → *research has been conducted*
This issue needs closer attention. → *requires closer attention*
The survey aims to get information on → *to obtain information*



Formal vocabulary

► Avoid phrasal verbs (verbs followed by a preposition)

This section looks at the practical issues.

→ *examines the practical issues*

This brings up an interesting question.

→ *raises an interesting question*

This goes against previous findings.

→ *contradicts previous findings*

► Replace less formal link words with more formal options

and, also → *furthermore, moreover, in addition,
additionally, as well as*

but → *however, nevertheless, although,
while, whereas*

so → *therefore, consequently, as a result*

like → *for example, such as*



Formal grammar

- ▶ Avoid contracted verb forms
 - e.g. Export figures **won't** improve. → **will not**
 - These results **can't** be ignored. → **cannot** (!)
- ▶ Construct longer, complex sentences
 - ▶ Link ideas using conjunctions, relative clauses, participle clauses (see slides on grammar / common errors)
- ▶ Use short, simple sentences sparingly
 - ▶ Rhetorical effect



! cannot = written as one word

Choppy, disconnected style

We will need to tie the activities to the milestone plan. The core team member bears the full responsibility for these activities. He can guarantee a close follow-up or monitor them in an efficient way. Otherwise, we run the risk of our plans getting rapidly out of synchronization. This would be detrimental to the future of the project. We have only just embarked on this project.

We will need to tie the activities **for which** the core team member bears the full responsibility to the milestone plan. **Thus**, he can guarantee a close follow-up or rather monitor them in an efficient way. Otherwise, we run the risk of our plans getting rapidly out of synchronization, **which** would be detrimental to the future of the project **on which** we have only just embarked.



Formal grammar

- ▶ Limit the use of “run on” expressions
(etc, and so forth)

e.g. *Other regions need the help of the WTO, the World Bank, etc.*
Scientists say that global warming may be induced by e.g.
volcanism or solar activity.

- ▶ Use a **more general** term combined with **including, such as, to include or and other**

e.g. *Other regions need the help of organizations such as the WTO and the World Bank.*
Scientists say that global warming may be induced by a variety
of **natural causes**, **including** volcanism and solar activity.



Formal grammar

► Limit the use of direct questions

e.g. *Have these rocks undergone any tilting or rotation since their deposition or formation?*

→ *This raises the question whether these rocks have undergone any tilting or rotation since their deposition or formation.*

A key issue is whether ...

It is unclear if...

This paper examines why ...



Depersonalisation

- ▶ Referring to the reader (*you*)
 - ▶ Avoid directly addressing the reader
 - e.g. **You can see the results in Table 1.*
 - *The results are shown in Table 1.*
- ▶ Self-reference (*I, we*)
 - ▶ Acceptable in some fields / contexts
 - ▶ To describe actions (methods)
 - e.g. *We first selected two specific types of ...*
 - ▶ Sometimes other constructions more appropriate
 - ▶ Context / background
 - e.g. **From previous research we know ...* → *Previous research suggests ...*
 - ▶ General observations / conclusions
 - e.g. **We can clearly see that ...* → *It is clear that ...*



Limiting self-reference

The related mathematical modeling **was performed** considering transient conditions. Diverse raw materials **were tested** in order to reveal their suitability for wet Flue Gas Desulfurization. **The research focused** on products from fixation processes materials as well as other types of limestone samples. In this way **it was found** that also waste materials from different environmental processes can **be used** for Flue Gas Desulfurization.

Depersonalisation examples

Limiting self-reference

- ▶ Passive constructions (impersonal)
- ▶ *This paper, article, study, ...* as subject of sentence
- ▶ Constructions with it (e.g. *it is clear that*)
- ▶ Adverbs expressing attitude (e.g. *unfortunately, surprisingly, remarkably*)



Limiting self-reference

- ▶ *This paper, article, study, ... as subject of sentence*
- ▶ Careful with:
 - ▶ Using *we* instead of *I* → only for multiple authors / team
 - ▶ Using *one* → not equivalent to *men* in Dutch
 - ▶ less common
 - ▶ *one* always includes the author
 - e.g. *One assumes that ...*
 - *It is often assumed that ...*



Limiting self-reference

► Passive constructions

We asked the respondents to complete a survey.

→ *The respondents were asked to complete a survey.*

! Avoid there-passives

**There was also investigated if ...*

→ *It was also investigated if ...*

** There was observed a strong correlation.*

→ *A strong correlation was observed.*



Limiting self-reference

- ▶ Constructions with *it*

It could be argued that ..., It would seem that..., It is true that ..., It is important to ..., It is clear that ..., It is widely acknowledged that ..., It is worth noting that ...

- ▶ Adverbs expressing attitude

unfortunately, regrettably, surprisingly, remarkably, luckily, obviously, clearly, interestingly, more importantly

- ▶ Adjectives with a positive or negative meaning

*... is worrying, detrimental, devastating, unfortunate
... is beneficial, useful, vital, encouraging, promising*



Tense usage

Different tenses can be used in the same section / paragraph
→ Use tenses appropriately and be aware of their implications

▶ Present tense

- ▶ Focus on current situation or outcome
 - e.g. *There **are** at present no experimental indications of which direction particle physics should go in order to better understand the Standard Model.*

▶ Present continuous

- ▶ Focus on activity as ongoing
 - e.g. *Optoelectronics **is becoming** increasingly important for information and communication technologies.*



Tense usage

▶ Present perfect

- ▶ Focus on period up to now

e.g. *Much progress **has been made** in recent years using both viral and non-viral methods.*

- ▶ Focus on current impact

e.g. *This study **has offered** new insights into the molecular mechanisms of adhesion.*

▶ Past

- ▶ Focus on completed action

(not necessarily long ago, but presented as completed at a specific moment in the past)

e.g. *The research **was carried out** in 30 farms, representing three production systems: milk production, pig production and crop production.*



Contrastive example:

*For many years, the relationship between landscape pattern and scale **has been a central issue in geography and ecology.** (and it still is)*

*For many years, the relationship between landscape pattern and scale **was a central issue in geography and ecology.** (but not anymore)*

Tense usage

▶ Present perfect continuous

- ▶ Focus on activity as ongoing over a period up to now
 - e.g. *Careful measurements show the global climate **has been changing** more rapidly in the last few years.*
 - Global mean surface temperatures **have been increasing** by 0.6 °C since the late nineteenth century.*
 - *have increased* (resultative meaning → present outcome, not ongoing process)
 - *have been increasing/have increased by at least 0.6 °C every year* (ongoing process)

▶ Past perfect

- ▶ Focus on action as completed before other action in the past
 - e.g. *The sample was tested after it **had been pre-incubated** for 30 min at 370°C.*



Titles

- ▶ No full sentences (usually)
 - ▶ Few verbs → nominalisations
What is required for ...
➢ *Requirements for ...*
 - ▶ Articles often left out
 - ▶ No full stop at end
 - ▶ Colons / question marks → subtitle / clarification
 - ▶ General → Specific
Rich Media, Poor Democracy? Communication Politics in Dubious Times
 - ▶ Topic → Method
Management of Natural Hazards: The Role of Spatial Planning
 - ▶ All words capitalised, except articles and prepositions
 - ▶ Article just after colon: capitalised
-



Titles

- ▶ Use key words
 - ▶ Avoid abbreviations
- ▶ Avoid using too many prepositions
 - ▶ Instead use adjectives / compound nouns
 - Approaches to weighting of terms in automatic retrieval of texts*
 - > *Term-weighting approaches in automatic text retrieval*
 - Requirements for Integration of Member States in Europe*
 - > *Integration Requirements in European Member States*



Introduction

- ▶ Relevant context / link with previous research
 - ▶ Referring to sources > reporting phrases (cf. Academic Phrasebank)
e.g. **Drawing on** the work of ... / This paper **builds on** current trends in ... / **According to** recent publications / As **observed** by ... / ... **states** that / ... **argues** that / ... **challenges** this view
- ▶ Gaps / limitations in existing research
 - ▶ Often introduced by contrastive link word
e.g. *Inference of entropy of chemical compounds using various approaches has been a widely studied topic. However, many aspects of entropy in chemical compounds remain unexplained.*



Literature review

- ▶ Write well-constructed paragraphs
 - avoid short (1-sentence) paragraphs
 - group different sources around common ideas
 - write clear topic sentences to identify the main themes



A review of the theoretical frameworks in the field of compliance with international rules shows that [three main schools of thought can be distinguished](#): enforcement, management and persuasion. The [enforcement approach](#) (Hart 1968; Olson 1965; Downs, Rocke and Barsoom 1996) focuses on pressure and sanctions when it comes to explaining the behaviour of states. It assumes that Member States choose not to comply on the basis of their own cost-benefit calculations. Hence, in order to ensure compliance, the possible losses when found in breach of a rule must be greater than the potential gains obtained from non-compliance. The level of compliance thus depends on the probability and severity of punishment. From such a perspective, IOs with substantial sanctioning power should be in a good position to bring about compliance.

In contrast, the [management approach](#) (Chayes and Handler Chayes 1993; Haas, Keohane and Levy 1994) assumes that non-compliance is above all due to financial, administrative or technical shortcomings (i.e. to a lack of resources or expertise), not to opposition to norms. Thus, the imposition of high fines does not improve compliance rates. From this perspective non-compliance is seen as a problem to be jointly solved by the IO and the state. Capacity-building through the transfer of knowledge and resources is the key to changing the behaviour of non-compliant states. In this sense, the functioning and well-equipped administrative structures of an IO should help improve compliance through management.

The enforcement and management approaches have competing assumptions about why actors do not comply, but they both exert positive (carrot) or negative (stick) instrumental influence in order to change Member State behaviour. The [third approach, persuasion](#) (Checkel 2001; Risse 2000; on reflexivity/responsiveness, see Neyer and Wolf 2005, 59–60), is distinctly different in that it aims to change the underlying norms and values that drive Member State action through a logic of appropriateness.



General overview (three main schools)

Literature review

- ▶ Write well-constructed paragraphs
 - avoid short (1-sentence) paragraphs
 - group different sources around common ideas
 - write clear topic sentences to identify the main themes
- ▶ Within paragraphs, highlight connections
 - ▶ between different studies
 - ▶ with your own work
 - ▶ areas for further research



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Relations between schools of thought (e.g. both, is distinctly different)

These are analytical categories rather than adequate descriptions of reality. Although the theoretical concepts depict different understandings of the functioning of interaction, in practice the logics are not exclusive. And according to Alter (2003, 56), 'It would be silly [for an IO] not to use all of these levers to encourage compliance.' **It must be determined empirically when and how** an IO follows the three logics in order to deal with a failure to implement or incorrect implementation. **What observable implications support the argument that** the IOs follow one (or several) of the three logics in its implementation management?

[...] By looking at the instruments that an IO uses in its implementation policy, we can assess whether its main logic of changing Member State behaviour is enforcement, management or persuasion. If an instrument is created to raise the costs of non-compliance through the imposition of (financial) sanctions or the discrediting of a Member State in the arena of the IO, I categorize the instrument as one following a logic of enforcement. An instrument that aims at lowering the barriers to implement a specific policy by promoting knowledge about how to solve problematic conflicts in the political system or by means of financial support to build up or reform administrative structures (concerned with either rule-making or application) is considered to follow a logic of management.



Relation to your own study (critical perspective > areas for further research)

Literature review

- ▶ Write well-constructed paragraphs
 - avoid short (1-sentence) paragraphs
 - group different sources around common ideas
 - write clear topic sentences to identify the main themes
- ▶ Within paragraphs, highlight connections
 - ▶ between different studies
 - ▶ with your own work
 - ▶ areas for further research
 - link words
 - meta-language (reporting verbs)



A review of the theoretical frameworks in the field of compliance with international rules shows that **three** main schools of thought can be distinguished: enforcement, management and persuasion. The enforcement approach (Hart 1968; Olson 1965; Downs, Rocke and Barsoom 1996) **focuses on** pressure and sanctions when it comes to explaining the behaviour of states. It **assumes** that Member States choose not to comply on the basis of their own cost-benefit calculations. **Hence**, in order to ensure compliance, the possible losses when found in breach of a rule must be greater than the potential gains obtained from non-compliance. The level of compliance thus depends on the probability and severity of punishment. **From such a perspective**, IOs with substantial sanctioning power should be in a good position to bring about compliance.

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Reporting phrases (yellow)
Linking phrases (green)

Note: just one direct quote

Incorporating sources

Incorporating other people's work:

1. Quoting: identical to original
small section
→ to be used sparingly
2. Paraphrasing: own words
specific point
3. Summarising: own words
main points only
general overview of source

ALWAYS ACKNOWLEDGE SOURCES!



Incorporating sources

Integrate in text or not?

- Short quotes:

must be integrated into a sentence; cannot stand alone

- use a *that*-clause / subordinate clause with *as*
- use “ ”



Integrating short quotes

In a critical response to the assumption that credible research models for art and design can only be found outside the field, Morgan has argued that “Art should not try to be science. Art should be art.” (Morgan, 2001:15)

For Haraway, a key feature of technoscience is that it is heterogeneous, so that it can be thought of as “a form of life, a practice, a culture, a generative matrix” (Haraway, 1997:50).



Incorporating sources

Integrate in text or not?

- Short quotes:

must be integrated into a sentence; cannot stand alone

- use a *that*-clause / subordinate clause with as
- use “ ”

- Longer quotes (3 lines or more):

stand-alone paragraph

- do not use “ ”
- indented paragraph
- preceded and followed by a blank line
- optionally in a smaller typeface
- introductory text often closes with a colon



In similar vein, Bernard Harris found boys and girls seemed to be treated equally.

Taken together with the evidence provided by children's heights, the mortality data provide few grounds for believing that past generations of girls were any more likely to suffer discrimination in the distribution of essential resources than girls today (Harris, 1998, p. 443).

However, Harris argues that this equality changed in adulthood, where an anti-female bias was apparent and may have contributed to excess mortality among women. So, questions remain as to whether there was discrimination within the nineteenth-century English household, and what form best describes the functioning of that household.



Adjusting a quote

► Omission

Hagen (1987: 75) writes: 'Several research projects have shown that teachers do not know how to cope with the problems of dialect-speaking children in schools. [...] Didactic literature seldom presents suggestions and recommendations.'

► Small alterations and additions

According to one recent study of globalisation, '[t]here is little doubt that there has been a growing internationalization of political decision-making.'



Adjusting a quote

- ▶ Adding italics

Bernstein (1973: 375) argues that this is something that is 'soon learnt by *both* teachers and pupils' (*my italics*).

- ▶ Indicating mistakes

Long (1774:270) defended the planters as 'humane and indulgent masters', claiming that their authority over enslaved people was 'like that of an antient (*sic*) patriarch'.

Hagen (1987: 75) writes: 'In teacher colleges and teacher training this problem is almost non-existent [*sic*]'.
►

Italics added/mine
emphasis added/mine

Effective paraphrasing

- ▶ Do not just replace words with synonyms
- ▶ Change the grammar and structure as well
 - ▶ change nouns into verbs, adjectives into adverbs
 - ▶ break up long sentences, combine short sentences
 - ▶ identify the logical links between the ideas and express these in a different way
- ▶ Do not change specific terminology
- ▶ Use **reporting language** to indicate that the ideas are not yours, but based on other sources
 - e.g. *Johnson (2007) concludes that stem cell numbers fluctuate widely during aging and that this has a strong genetic basis.*
A more recent study shows that stem cell numbers fluctuate widely during aging and that this has a strong genetic basis (Johnson, 2007).



Reporting phrases:

e.g. according to, claim, state, discuss, examine, show, conclude, suggest, ...

Reporting verbs

► Tense usage

- past tense: completed action
→ more distance

e.g. Jones (2005) **concluded** that ...
 - present perfect: how the field has evolved up to now / focus on current impact
→ more relevant

e.g. Recent research **has become** more aware of industry concerns.
Jones (2005) **has concluded** that ...
 - present tense: established knowledge / focus on current situation
→ very relevant still

e.g. Heart functions **are characterized** by two distinct periods called systole and diastole.
Jones (2005) **concludes** that ...
- **increasing degree of closeness / relevance**



Tense usage

- ▶ Avoid unnecessary use of progressive forms
 - ▶ Most research on unemployment **has been focusing** on the role of labour market institutions.
 - ▶ **has focused on**
 - ▶ Their findings **are pointing to** substantial differences in labour market effects.
 - ▶ **point to**
 - ▶ The second group of contributions **are dealing with** these effects at the regional level.
 - ▶ **deal with**



Progressive forms > should only be used to present an activity as ongoing, temporary, changing or developing, happening *now*

Methods

- ▶ Describe steps in logical order and avoid repetition
 - ▶ Make connections between different steps
 - first, next, then, finally
 - e.g. *The tissue was **first** categorised into ... **Next**, the cells were analysed ... The mutations were **then** compared to ... **Finally**, the tissue was exposed to ...*
 - clear reference
 - e.g. *The **first** step was to ... / **which** made it possible to ... / **This** sample was further ... / The **resulting** compound was used to ... / To identify the effect of the agent, a **second** experiment was conducted / The **final** part of the experiment involved ...*



Methods

- ▶ Describe steps in logical order and avoid repetition

- ▶ Vary sentence structure and word order

e.g. sentence-initial vs. mid-sentence position of link words

*The tissue was **first** categorised into ... **Next**, the cells were analysed ... The mutations were **then** compared to ... **Finally**, the tissue was exposed to ...*

- ▶ Do not overuse single sentences for single activities

e.g. relative clauses, ing-forms, to-infinitives

*The first step was to ... , **which** made it possible to ...*

***To identify** the effect of the agent, a second experiment was conducted. The final part of the experiment involved ..., **resulting** in an increased ...*



Results

- ▶ Large amount of complex information
 - ▶ Do not list every single detail / every single number
 - Focus on the most striking results only
 - Tables, figures offer complete overview
 - ▶ First identify **general trends** and then focus on **specific details**
 - Use approximations (e.g. roughly, nearly , about) instead of exact figures



General ↔ specific: Improving clarity

The intervention group consisted of 15.6% of the men and 0.4% of the women, while the control group consisted of 17.4% of the women versus 2.0% of the men.

The intervention group **consisted mainly of men** (15.6% of the men and 0.4% of the women), while the control group **consisted primarily of women** (17.4% of the women versus 2.0% of the men).



In the first example, the reader only gets percentages but gets no information about general trends or about the difference between the two groups.

In the second example, this is much clearer because the general trend is highlighted. This principle can be applied not just to individual sentences but to the results section as a whole.

Results

- ▶ Describing results / data / visuals
 - ▶ Use phrases to **direct attention** to visuals
 - e.g. *As the graph shows, ...*
 - Table 1 provides an overview of ...*
 - ▶ Establish **logical links** (e.g. contrast, similarity)
 - ▶ Use **focusing constructions** to highlight what is important
 - e.g. *What is striking is the ...*



Results: example

Seven countries showed an increase in antibiotic use of less than 4% between 1993 and 1997. Large increases were noted in Italy (34%) and Luxembourg (12%). A reduction in antibiotic use was seen in five countries: Sweden had the largest (21%) and Greece the smallest (4%). In 1997, there was a more than four-fold variation between countries in non-hospital use of antibiotics. France had the highest use, and the Netherlands, the lowest. [...]

The most remarkable finding in this analysis was the great variation in outpatient antibiotic use. The large variation is unlikely to be caused by differences in frequency of bacterial infections. The pronounced differences between Belgium and the Netherlands are noteworthy because of the close proximity of the countries and their common language. In addition to physicians' and patients' attitudes to antibiotics, historical backgrounds, cultural and social factors, and disparities in health-care systems might also be important factors in determining prescribing patterns.



Paragraph 1: general (green) vs. specific (blue)

Paragraph 2: focusing constructions

How to write numbers

Seven countries showed an increase in antibiotic use of less than 4% between 1993 and 1997. Large increases were noted in Italy (34%) and Luxembourg (12%). A reduction in antibiotic use was seen in five countries: Sweden had the largest (21%) and Greece the smallest (4%). In 1997, there was a more than four-fold variation between countries in non-hospital use of antibiotics. France had the highest use, and the Netherlands, the lowest. [...]

The most remarkable finding in this analysis was the great variation in outpatient antibiotic use. The large variation is unlikely to be caused by differences in frequency of bacterial infections. The pronounced differences between Belgium and the Netherlands are noteworthy because of the close proximity of the countries and their common language. In addition to physicians' and patients' attitudes to antibiotics, historical backgrounds, cultural and social factors, and disparities in health-care systems might also be important factors in determining prescribing patterns.

Results

- ▶ Numbers written as numbers
 - ▶ **Exact** statistical results, scores, sample sizes, mathematical functions and units of measurement
e.g. multiply by 5, 10 cm long, 7.5%
 - ▶ Specific place in a **numbered series**
e.g. table 5, section 3
- ▶ Numbers written as words
 - ▶ Numbers **under 10** which are not exact measurements
e.g. **eight** items were discarded
 - ▶ Avoid using numbers at the **start of the sentence**
e.g. ~~75% of participants reported ...~~
→ *Seventy-five percent of participants reported ...*



Chance ↔ likely / likelihood

- ▶ Thus, women **have less chance of being** in supervisory positions.
 - > ... women **are less likely to be** in supervisory positions
- ▶ Firms that follow these strategies **have more chances of** succeeding.
 - > ... strategies **have a greater likelihood of** succeeding



Discussion & conclusions



- ▶ Cautious, tentative language
(= hedging)
 - ▶ To make your conclusions sound less absolute
 - ▶ To leave room for interpretation, debate
- e.g. *The independent testing demonstrates that the proposed method could accurately identify SRPs in mammals as well as plants.*
These insights can be of a great importance in understanding the activity and stability of Fe-based bimetallic nanoparticles under reactive environments.



Discussion

- ▶ Use of cautious, tentative language
 - ▶ How could the strength of the following claim be reduced?

These results are problematic.
- ▶ Various strategies:
 - ▶ *These results seem problematic.*
→ Weaker verbs (e.g. *seem, suggest*)
 - ▶ *These results could be problematic.*
→ Modals (e.g. *may, could*)
 - ▶ *These results are rather problematic.*
→ Adverbs (e.g. *often, rather, perhaps*)
 - ▶ *These results are likely to be problematic.*
→ Adjectives (e.g. *possible, likely*)
 - ▶ **Some** of these results are problematic.
→ Determiners (e.g. *some, many*)



Hedging

= tentative, cautious formulation to avoid

- **absolutes (are)**
- **over-generalisation (everyone)**

→ different linguistic resources

Hedging devices:

- ▶ **Modal verbs**
- ▶ **Weaker verbs**
- ▶ **Adjectives**
- ▶ **Adverbs**
- ▶ **Determiners**



Reduce likelihood

Reduce frequency

Reduce strength

Add distance

*(remove yourself from a claim /
ascribe to others)*



Hedging devices

► Modal verbs

This may affect ... , This could be ..., It might result in ...

► Adjectives

... is likely to ..., It is possible that ..., This is a potential ...

► Adverbs

*rather, quite, just, slightly, somewhat
often, frequently, usually, sometimes, occasionally, generally
possibly, probably, potentially, perhaps*

► Weaker verbs

*This tends to ..., It seems that ..., This appears to ..., These results
indicate ..., Evidence suggests ...*

► Determiners

*In the view of some experts ..., Many specialists regard ..., Some argue
that ..., In most parts of the country, ...*



Step 3: Editing

- ▶ Allow sufficient time to edit and revise your text
- ▶ Not just superficial mistakes
- ▶ Critical look at structure, coherence and flow
 - ▶ Some more advanced issues (foregrounding, conciseness)
 - ▶ Common errors
 - ▶ Vocabulary
 - ▶ Grammar
 - ▶ Punctuation



Editing checklist

Spelling, grammar and punctuation

- Accurate spelling {watch out for errors not detected by spell checker}
- Consistent spelling (e.g. British vs. American spelling)
- Correct use of punctuation marks, commas in particular
- Accurate grammar, correct use of basic grammatical structures
 - verb forms : tenses and subject-verb agreement (singular vs. plural)
 - articles and determiners (e.g. much / many, (a) few / (a) little)
 - adjectives / adverbs, adverb position
 - connectors (e.g. despite / although / however)
 - relative pronouns (e.g. who, which, that)
 - conditional clauses
- Longer, complex structures rather than short, isolated sentences

Vocabulary

- Correct word choice, particularly how words are combined (= collocational patterns)
→ Google phrases which sound *awkward* to you ("..." siteuk or Google Scholar)
- Accurate and consistent topic-specific vocabulary
- Variation in general academic phrases rather than repetition

Structure and flow

- Text structure
 - Information logically divided into paragraphs
 - Well-considered progression of ideas
- Paragraph structure
 - Related information, unifying idea (expressed in topic sentence)
 - Well-connected sentences with a clear focus
 - Use of connectors to express logical relations

} reader-friendly writing

Style

- Formal word choice rather than basic, conversational items
- Formal grammatical structures (e.g. full verb forms, indirect questions, formal linking and longer / complex sentences)
- Condenseness: efficient word choice and no unnecessary repetition
- Objective, impersonal constructions
- Use of hedging (tentative language) to avoid over-generalisation or absolute statements



Reverse outlining

► Useful editing strategy

- Make outline based on your text
 - Write down the topic of each paragraph
 - Clear topic sentences will be helpful
- Helps you identify potential problems
 - Is each paragraph focused and clear?
 - Is there any unnecessary information in the paragraph?
 - Are the paragraphs presented in a logical order?
 - Is every paragraph relevant to the text's main objectives?
 - Is there unnecessary overlap between paragraphs?
 - Are some paragraphs too long/short?



Text structure: Paragraphs

A well-structured text is constructed by clear paragraphs

- ▶ not just a block of text of a particular length
- ▶ not just a series of perfect sentences
- characteristics of a well-written paragraph:
 - ▶ Coherence (connected sentences)
 - ▶ Unity (one controlling idea)
 - ▶ Topic sentence (states paragraph's main idea; other sentences clarify, illustrate or justify)
- avoid very short or one-sentence paragraphs



Structure at text level

Paragraph unity

A paragraph logically develops one central idea:

- ▶ Only include information related to the central idea
- ▶ Start a new paragraph when the idea has been adequately developed and something new is introduced



Paragraph unity

How can you achieve paragraph unity?

- ▶ as you write keep central idea + previous sentence in mind
- ▶ strategies that can enhance unity:
 - ▶ repetition: reformulate your claim
 - ▶ exemplification: illustrate your point
 - ▶ justification, clarification: explain your ideas
 - ▶ limitation: limit your point
 - ▶ generalisation: broaden your scope
 - ▶ compare and contrast: draw parallels or distinctions
 - ▶ cause and effect: analyse your point
 - ▶ chronology: describe a process or development



Topic sentence

- ▶ **main idea** of paragraph; unifies content
- ▶ most commonly **at beginning** of paragraph
 - ↔ sometimes later in paragraph:
 - e.g. to start with sentence that links paragraph to previous one
to provide convincing details before presenting the more general claim
 - ↔ in some cases, acceptable not to include topic sentence:
 - e.g. when same idea from previous paragraph is carried over and elaborated on
when paragraph primarily narrates a series of facts



Topic sentence: example

A post-secondary education can have very positive effects on income and employment. Numerous studies conducted in the United States over the past ten years have demonstrated that **earnings** for anyone with a **post-secondary education** are on average 20 percent higher than the earnings of those whose education stopped with a high school diploma. **Incomes** are higher still for those with **four-year degrees**, and even higher at the **master's and doctoral levels**. Regardless of the **post-secondary degree level**, graduates are 15 percent **less likely to be laid off** in difficult economic times.

Adapted from Purdue OWL



Improving coherence and flow

► Coherence?

- logical relations between ideas are made clear
- easier for reader to follow argumentation

► Flow?

- sentences flow smoothly from one to the next
- short, disconnected sentences are avoided

► Strategies

- Reference (pronouns)
- Linking (link words, relative clauses, participle clauses)
- Given-new structure
- Foregrounding-backgrounding



Reference

Pro-forms: refer back to word / idea

→ create very strong links between sentences

‣ Pronouns

‣ *This / these / such + summary word*

e.g. *This hypothesis, suggestion, argument, ...*

These views, trends ...

Such an approach, such evidence

The explanation given above ...

The controversy outlined in the first section of this paper...

‣ Avoid ambiguous reference

‣ Do not start a paper by referring back to the title

e.g. *This issue is currently the subject of much debate.*



Linking

Link words: make logical links between sentences explicit

- ▶ Various link words to express the same logical relations
- ▶ Different grammatical usage!
 - ▶ Preposition / prepositional phrase → followed by noun (phrase)
 - ▶ Conjunction → combination of two clauses to form one sentence
 - ▶ Adverb → two separate sentences
 - only creates logical link, not a grammatical link



Preposition = voorzetsel

Conjunction= voegwoord

Adverb = bijwoord

Link words: usage patterns

Are the following link words used correctly?

- ▶ There are no available data to check the calculations, **nevertheless** this method is believed to be the best one.
- ▶ **Despite** there is growing concern over urban air pollution, relatively little is understood about its impact on public health.
- ▶ The results of the multidimensional scaling routines are not quite satisfying, **therefore** this article introduces a new iteration model.
- ▶ These technological changes have changed **both** mathematics **as well as** its applications.



There are no available data to check the calculations. **Nevertheless**, this method is believed to be the best one. (nevertheless = adverb)

Despite growing concern over urban air pollution, ... / **Although** there is ... (despite = preposition / although = conjunction)

The results of the multidimensional scaling routines are not quite satisfying.

Therefore, this article introduces a new iteration model. (therefore = adverb)

have changed **both** mathematics **and** its applications / have changed mathematics **as well as** its applications / ! ~~have changed as well mathematics as its applications~~

Link words: usage patterns

Contrast

- ▶ *in spite of, despite, in contrast with/to, contrary to*

→ followed by noun phrase

e.g. *In contrast to most of the previous empirical work, our evidence suggests that the costs are larger than the benefits.*

- ▶ *but, yet, although, even though, whereas, while*

→ combination of two clauses that form one sentence

e.g. *Although treatment was successful in 20 of 22 attempts, a more thorough study is essential.*

Seventy per cent of patients showed a clinical response to cA2 treatment, whereas this occurred in only 24% of those treated with a placebo.

- ▶ *however, nevertheless, nonetheless, still, rather, on the other hand, in/by contrast, even so, on the contrary*

→ two separate sentences

e.g. *The private sector, by contrast, has plenty of money to spend. Nevertheless, the private sector has plenty of money to spend.*



Contrary to: quite restricted in use -> only with beliefs and opinions

e.g. Contrary to popular belief ...

Contrary to what is often assumed ...

On the contrary: often used incorrectly -> meaning is 'I have just said that something is NOT the case; I am now going to reinforce that and go one step further by saying that the opposite is true, and here it is'

e.g. It is not an idea around which this community can unite. On the contrary, I see it as one that will divide us.

I am not a feminist, on the contrary.

It wasn't a good idea; on the contrary it was a huge mistake.

Link words: usage patterns

Cause and effect

- ▶ **due to, thanks to, because of, owing to, hence**

→ followed by noun phrase

e.g. *The patient almost died due to lack of oxygen.*

- ▶ **since, as, because, so**

→ combination of two clauses that form one sentence

e.g. *As this analysis was potentially problematic, we performed a second sensitivity analysis*

- ▶ **therefore, accordingly, consequently, as a result, thus, hence**

→ two separate sentences

e.g. *The cost of transport is a major expense for an industry. Hence factory location is an important consideration.*

Progress so far has been very good. We are, therefore, confident that the work will be completed on time.



Due to + negative / **thanks to** + positive / **owing to, because of** + neutral

As <-> **since**: as presents the cause as if it is well-known or obvious.

As/since: less precise in meaning than **because**, indicates more of a causal relation than explicit reason (e.g. precisely because vs * precisely as/since)

Therefore ≠ for this purpose, to this end (often misused by Dutch speakers as *daarvoor*)

Hence & therefore: what follows is a necessary deduction from what precedes

Therefore -> stresses what follows

Hence -> emphasises what came before -> often interpreted as an illustration of the previous statement

(**For**: very formal conjunction, introduces explanation or justification, often has the additional interpretation 'it is after all the case that')

Link words: usage patterns

Enumeration

first(ly), second(ly), last(ly), finally

first of all, to begin with, to conclude

next, then, eventually



first <-> ***firstly*** etc. -> do not mix the forms with or without –ly in one and the same list

To list arguments, considerations etc., both forms can be used

To order a set of temporal events, only use ***first*** (preferably followed by ***then / next*** rather than ***second***)

eventually = in the end, after some time ≠ maybe, possibly

Link words: usage patterns

Addition

- ▶ *apart from, in addition to, besides, as well as, both ... and*
 - followed by noun phrase
 - ▶ *and*
 - combination of two clauses that form one sentence
 - ▶ **furthermore, moreover, in addition, additionally, similarly, also, equally**
 - two separate sentences
- e.g. *Kuwait's oil will last over for more than 200 years at current production levels. Moreover, new reserves continue to be discovered.*



Furthermore <-> **moreover**: subtle difference

furthermore adds one more point to a list of points already made

moreover tends to introduce an argument which has greater weight

for the writer

Note the following two structures:

X as well as Y

both X and Y

Link words: usage patterns

Exemplification

- ▶ *an illustration of*

→ followed by noun phrase

- ▶ *to illustrate, to demonstrate, take the case of*

→ separate sentence

e.g. *To illustrate, consider a model similar to the previous example, except that the dependent variable y is a dummy variable.*

*Certain costs of government could and should be reduced.
Take the case of public education.*

- ▶ *for example, for instance, specifically, to be specific*

→ followed by noun phrase or used in separate sentence

e.g. *Many countries, for example Mexico and Japan, suffer from frequent earthquakes.*

Specifically, our research shows that company growth is more often determined by internal factors than by the external business environment.



Link words: usage patterns

Exemplification

► **e.g.**

→ *for example*

citrus fruits, e.g. oranges and grapefruit

► **i.e.**

→ *that is, to be specific*

adults, i.e. people over 18

► **viz(.)**

→ *namely*

three Greek cities viz Athens, Thessaloniki, and Patras



e.g. = for example

i.e. = written before a word or phrase that gives the exact meaning of something you have just written or said (that is, to be specific)

viz(.) = used before naming things that you have just referred to in a general way (namely)

Link words: usage patterns

Condition

- ▶ *in case of*

→ followed by noun phrase

e.g. *Blood becomes stickier to help coagulation in case of a cut.*

- ▶ *if, unless, on condition (that), provided/providing (that), in case*

→ combination of two clauses that form one sentence

e.g. *The economy is in danger of collapse unless far-reaching reforms are implemented.*

A large number of samples can be screened in a few hours, provided the experiment is correctly designed and performed.

- ▶ *otherwise*

→ two separate sentences

e.g. *Avery (2006) pointed out that a correction factor must be applied. Otherwise, the results obtained would be distorted.*



Unless: negative condition

Provided/providing (that): as long as, only if, on the condition that

Otherwise -> sometimes also used as conjunction -> two clauses forming one sentence

Link words: usage patterns

Concession (willingness to acknowledge other views)

► *albeit*

→ followed by a noun phrase, adjective, prepositional phrase or adverb
e.g. *A proportion, albeit a small one, of the variance in relative body-weight could be ascribed to energy density.*

► *although, even though*

→ combination of two clauses that form one sentence

e.g. *Although treatment was successful in 20 of 22 attempts, a more thorough study is essential.*

► *admittedly, of course*

→ two separate sentences

e.g. *Admittedly, this has been a cursory and somewhat limited review.*



Link words: usage patterns

Purpose

- ▶ *for the sake of*

→ followed by noun phrase

e.g. *For the sake of clarity, the derivation of the scheme given below follows a geometrical rather than an algebraic line of reasoning.*

- ▶ *in order to, so as (not) to*

→ followed by infinitive

e.g. *In order to understand how the human body works, you need to have some knowledge of chemistry.*

- ▶ *so that*

→ combination of two clauses that form one sentence

e.g. *Moisture is drawn to the surface of the fabric so that it can evaporate.*



Given-new principle

- ▶ Start with information already known to the reader
 - ▶ To create a link with the previous sentence
 - ▶ Place new information towards the end of the sentence
 - ▶ Part of the sentence that has most emphasis
- = Optimal information distribution in the sentence
- ▶ New information is related to what is already known
 - facilitates information processing and improves transparency



Given-new principle

e.g. *Many studies have examined religious involvement and health. The majority of these have found that religious people are physically healthier and require fewer health services.*

- information that is easily recoverable from the previous context

Electronics are no longer built to last. Mobile phones, for instance, are discarded after only a couple years.

- information that is associated with a concept that has already been introduced



Given-new principle: examples

Compare the two paragraphs. Which is easier to understand?

The main threat to the environment is the country's rapid industrial expansion. Unprecedented levels of pollution and damage to the fragile ecosystem result from this. The economic aspects, however, seem to eclipse these concerns.

The main threat to the environment is the country's rapid industrial expansion. This has led to unprecedented levels of pollution and damage to the fragile ecosystem. These concerns, however, seem to be eclipsed by the economic aspects.



Given-new principle: examples

The main threat to the environment is the country's rapid industrial expansion. Unprecedented levels of pollution and damage to the fragile ecosystem result from this. The economic aspects, however, seem to eclipse these concerns.

- Each sentence starts with new information which at first sight seems unrelated to what has come before.
 - Difficult to see what paragraph is about, what point the writer wants to make
 - Appears to be about 3 different topics



Given-new principle: examples

The main threat to the environment is the country's rapid industrial expansion. This has led to unprecedented levels of pollution and damage to the fragile ecosystem. These concerns, however, seem to be eclipsed by the economic aspects.

- Each sentence (apart from the first one) begins with familiar information / something that has already been mentioned.
 - New information is placed at the end of the sentence
 - Makes it easier for readers to see how each new piece of information fits into what they already know



Given-new principle: examples

Why is the same information presented in a different order in each paragraph?

In modern capitalist societies governments tend to earn considerably less income from taxes than what they need to cover their costs. This general tendency for government revenues to rise more slowly than government spending is discussed by O'Connor (1973). He offers two main explanations for ...

James O'Connor's (1973) framework offers a valuable insight into the financial imbalances plaguing most Western governments these days. O'Connor discusses the general tendency for government revenues to rise more slowly than government spending. This phenomenon can be explained by ...



Given-new principle: examples

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Given-new principle: examples

Different information structure creates confusion
→ given information in focus position is understood as new

In modern capitalist societies governments tend to earn considerably less income from taxes than what they need to cover their costs. O'Connor discusses the general tendency for government revenues to rise more slowly than government spending. He offers two main explanations for ...

James O'Connor's (1973) framework offers a valuable insight into the financial imbalances plaguing most Western governments these days. This general tendency for government revenues to rise more slowly than government spending is discussed by O'Connor (1973). This phenomenon can be explained by ...



Light-heavy principle

- ▶ In line with given-new principle
 - ▶ Place shorter constituents towards the beginning of the sentence
 - ▶ To avoid top-heaviness
 - ▶ Place longer, more complex elements in final position
 - ▶ To avoid a weak ending
- makes it easier to process the message



Light-heavy principle: examples

The influence of different taxation systems on the distribution policy of international corporations is investigated.

Advertising spyware that is installed without the user's knowledge and which logs information about the user, including passwords, email addresses, and web browsing history constitutes a problem, however.

- Top-heavy sentences
 - difficult to read
- Weak ending
 - rhetorical impact lost



Foregrounding - backgrounding

- ▶ Foregrounding the most relevant information
- ▶ Backgrounding supporting, less important details
 - ▶ To improve focus
- ▶ Strategies
 - ▶ Complex noun phrases
 - ▶ Clause combining
 - ▶ Sentence position



Foregrounding - backgrounding

- ▶ Complex noun phrases
 - ▶ Useful to provide supporting, contextual information
 - ▶ Information modifying the head noun is not put in focus
 - e.g. *EU President Van Rompuy will lead a task force to ...*
 - ▶ Often more natural in English to place additional information **before** the head noun
 - Noun groups
 - Adjectives
 - Possessives
 - ▶ Constructions with **prepositions** which **follow** the head noun tend to be overused by Dutch speakers
 - e.g. *policies for the environment in Europe*
→ *European environmental policies*



Foregrounding - backgrounding

► Clause combining

- Information in the main clause is foregrounded
- Information in subordinated clauses is backgrounded

e.g. *Although Van Rompuy has helped to respond to the euro crisis, he has done little to explain its importance to ordinary people.*

Van Rompuy, who was Belgian prime minister before his appointment as EU president, called the situation extremely pitiful.



Foregrounding - backgrounding

▶ Sentence position

- ▶ Sentence-initial position
 - ▶ orientation function
 - ▶ backgrounded status

e.g. *As EU President, Van Rompuy has expressed his belief that expulsion from the 'EuroZone' is wrong.*

▶ Sentence-final position

- ▶ more foregrounded
- ▶ best used to present new and important information

e.g. *Although Van Rompuy represents the EU externally, much of his work consists of "behind the scenes" management.*



Foregrounding - backgrounding

Compare the two examples below.

Harry Potter tells the story of a boy wizard. The books were written by JK Rowling and the final film has now been released. For the fans this marks the end of an era. JK Rowling's creation has dominated the imaginative lives of children for 15 years, but with the release of the final film featuring the boy wizard, the age of Harry Potter finally draws to a close.

- ▶ In the first, all the information seems equally important and there is no clear focus.
- ▶ The second example contains the same information, but basic facts are not put in focus position and only the most relevant information is foregrounded.



Conciseness

- ▶ **Text / paragraph level**
 - ▶ Content
 - ▶ Selection of information: avoid repetition / too many details
- ▶ **Sentence level**
 - ▶ Language
 - ▶ Sentence structure
 - ▶ Word choice



Conciseness

▶ Word choice

- ▶ Repetition and redundancy
 - ▶ Tautology, needless words, wordy phrases
 - e.g. *at this point in time, despite the fact that*
- ▶ Inefficient word choice
 - ▶ Accurate topic-specific terminology vs. longer descriptions
 - e.g. *the number of people who actually go out and vote*
(vs. voter turnout)
 - ▶ Very formal constructions for no reason
 - e.g. *a plethora of*
 - ▶ Unnecessary meta-language
 - e.g. *in my opinion, as already mentioned*



Conciseness

- ▶ Sentence structure

- ▶ Unnecessary subclauses

e.g. ***There are*** some researchers ***who*** claim...
→ Some researchers claim ...

When there is a higher concentration of hormones,
this results in ...

→ A higher concentration of hormones results in ...

It is a significant advancement in this field ***that*** ...

→ A significant advancement is this field is ...

Doctors should be careful that they do not overload patients with information.

→ Doctors should be careful not to overload ...



Conciseness

► Sentence structure

- Linking clauses rather than repeating words

- (reduced) relatives

- participle clauses

e.g. *After a brief rise in temperature, the snow will either continue to melt or it will refreeze. This melting or freezing strongly affects vegetation patterns.*
→ *which strongly affects ... / strongly affecting ...*



Conciseness

- ▶ Sentence structure
 - ▶ Overuse of prepositions
 - ▶ Often more natural in English to place words **before** the head noun (complex noun phrases)
 - Noun groups / adjectives / possessives
 - ▶ Constructions with prepositions which **follow** the head noun tend to be overused by Dutch speakers
 - e.g. *policies for the environment in Europe*
→ *European environmental policies*
 - recent technologies with low costs*
→ *recent low-cost technologies*



Conciseness

► Sentence structure

► Unnecessary pronouns and reference

e.g. *When teachers give instructions, they often do this by presenting **the students** a set of prescribed steps.*

→ *When teachers give instructions, they often present a set of ...*

*This study evaluates the effects of a drug education programme on the students involved **in it**.*

→ *on the students involved*



Conciseness

► Verbs vs nouns

► Noun phrase → verb phrase

- action verbs vs. noun + dummy verb

e.g. ***an analysis of voter turnout was conducted***

→ ***voter turnout was analysed***

► Verb phrase → noun phrase

- fewer words, more specific focus

e.g. ***studies how this technique was adopted***

→ ***studies the adoption of this technique***

to compare how researchers collected their data in different studies

→ ***to compare data collection in different studies***



Common errors

Usage rules and examples

Tense usage

General usage rules

▶ Present tense

- ▶ Focus on current situation or outcome

e.g. *There **are** at present no experimental indications of which direction particle physics should go in order to better understand the Standard Model.*

▶ Present continuous

- ▶ Focus on activity as ongoing

e.g. *Optoelectronics **is becoming** increasingly important for information and communication technologies.*



Tense usage

▶ Present perfect

- ▶ Focus on period up to now

e.g. *Much progress **has been made** in recent years using both viral and non-viral methods.*

- ▶ Focus on current impact

e.g. *This study **has offered** new insights into the molecular mechanisms of adhesion.*

▶ Past

- ▶ Focus on completed action

(not necessarily long ago, but presented as completed at a specific moment in the past)

e.g. *The research **was carried out** in 30 farms, representing three production systems: milk production, pig production and crop production.*



Contrastive example:

*For many years, the relationship between landscape pattern and scale **has been a central issue in geography and ecology.** (and it still is)*

*For many years, the relationship between landscape pattern and scale **was a central issue in geography and ecology.** (but not anymore)*

Tense usage

▶ Present perfect continuous

- ▶ Focus on activity as ongoing over a period up to now
 - e.g. *Careful measurements show the global climate **has been changing** more rapidly in the last few years.*
 - Global mean surface temperatures **have been increasing** by 0.6 °C since the late nineteenth century.*
 - *have increased* (resultative meaning → present outcome, not ongoing process)
 - *have been increasing/have increased by at least 0.6 °C every year* (ongoing process)

▶ Past perfect

- ▶ Focus on action as completed before other action in the past
 - e.g. *The sample was tested after it **had been pre-incubated** for 30 min at 370°C.*



Tense usage

Guidelines for tense usage in academic papers
(not absolute rules)

► Introduction

► Relevant context:
importance of issue / main problem areas

► current state of the field: present tense

- e.g. *It is crucial to understand the behavior of trace elements in geological processes.*
Identification of rock boundaries and structural features from well log response is a fundamental problem in geological field studies.

► impact over the years: present perfect

- e.g. *In recent years, tourist taxes have become an easy way for governments to collect extra revenue for investments, infrastructure and social services.*



Tense usage

- ▶ Referring to earlier studies
 - ▶ Existing research
 - ▶ Current established knowledge: present tense
 - e.g. *Heart functions **are** characterized by two distinct periods called systole and diastole.*
 - ▶ Research to date: present perfect
 - e.g. *Recent postharvest biocontrol research **has become** more integrated into production systems, with greater awareness of industry concerns.*



Tense usage

- ▶ Referring to earlier studies
 - ▶ Specific source
 - ▶ what researcher did:
simple past (focus on completed action)
e.g. *Jones (2005) investigated the causes of diabetes.*
Higgins (2002) analysed ...
 - ▶ what researcher wrote/thought:
different options: past tense / present perfect / present tense
→ increasing degree of closeness / relevance
e.g. *Jones (2005) concluded that ...*
(completed action → more distance)
Jones (2005) has concluded that ...
(impact on present → more relevant)
Jones (2005) concludes that ...
(current situation → very relevant still)



Tense usage

► Objectives: present tense (or future tense)

e.g. *The purpose of this paper is to develop a general, systematic treatment of the multiple scattering of waves.*

This study will explore the role of tourism in revitalization of agriculture heritage and conservation of natural resources.

► Methods: past tense

e.g. *The intensity matrix was used to calculate a distance matrix with Euclidean distances.*

► Results: past tense (or present tense)

References to figures / tables: present tense

e.g. *Figure 3 shows that allantoin increased remarkably during the development of the leaves.* (→ focus on the specific experiment)

Table 1 shows that sensitivity is higher when these sensors are operated at room temperature. (→ presented as more general conclusion)



Tense usage

► Conclusions

► Relevance / implications: present tense

e.g. *The findings of this study **emphasise** the importance of prompt blood-pressure control in hypertensive patients.*

► Limitations

► present tense (focus on current outcome)

e.g. *Genomic sequencing is no longer a novelty, but gene function annotation **remains** a key challenge in modern biology.*

► present perfect (focus on research up to now)

e.g. *Studies relying on air temperature alone **have failed** to predict tourism demand for the development of certain destinations.*

► past tense (focus on methods / results used in study itself)

e.g. *Unfortunately, this study **was** unable to find any statistically significant associations.*

► Suggestions for future research or applications:

present tense or future tense

e.g. *Understanding the role of epigenetic processes in plant stress tolerance **will offer** interesting opportunities for plant breeders. The possible use of this system at higher energies **requires** further study.*



Determiners

- ▶ much ↔ many

e.g. ***much*** research
many studies

- ▶ little ↔ few

e.g. ***little*** information
few details

- ▶ less ↔ fewer

e.g. ***less*** evidence
fewer occurrences

→ uncountable (singular) nouns vs countable (plural) nouns



Note that research is an uncountable noun -> * a research / * researches

Determiners

- ▶ some ↔ any

e.g. *This approach has yielded **some** promising results.*

*Subsequent research has failed to yield **any** substantial safety benefits.*

*Experimental work to date has not yielded **any** positive results.*

- affirmative sentences vs. negative sentences/questions

***Any** attempt to explain the development of mountain belts must account for the following.*

- when the meaning is 'it doesn't matter which'

- ▶ a little ↔ little

e.g. *The yeast and oil were mixed with **a little** water and placed in a petri dish.*

*Preliminary tests indicated that further iterations had very **little** effect.*

- small positive amount (*a bit*) vs. small negative amount (*not much*)

- ▶ a few ↔ few

e.g. *This observation allows us to draw **a few** interesting conclusions.*

*Unfortunately, **few** relevant fossils are known from that time interval.*

- small positive number (*some*) vs. small negative number (*not many*)



a little / little vs. a few / few

-> uncountable, singular vs. countable, plural

Articles

- ▶ **Indefinite article (*a, an*)**
 - ▶ Indefinite, non-specific reference
 - ▶ Something new, not yet mentioned
- ▶ **Definite article (*the*)**
 - ▶ Definite, specific reference
 - ▶ Something known, already mentioned, ‘grounded’ within the text
- ▶ **Zero article**
 - ▶ Generic reference (singular, uncountable)
 - ▶ Indefinite reference in the plural



Articles

► Generic reference / introduction of new concept

e.g. *The participation index is an aggregate of the voter turnout.*
→ *an aggregate of voter turnout*

This measure of welfare spending is constructed by calculating the government spending on health, education and other social services as a percentage of the GDP.

→ *by calculating government spending on health ...*
→ *as a percentage of GDP*

► Specific reference / already established within the context

e.g. *The birds were injected with thymidine and testosterone. The effect of the hormones was ...*

→ Pronouns often have stronger effect

e.g. *The effect of these hormones was / Their effect was /, whose effect was*



calculating government spending on ... (= general concept) ↔ calculating the government's spending on ... (definite reference, *this specific government*)
as a percentage of GDP ↔ the GDP of Belgium (= specific reference)

Adjectives and adverbs

► Adjectives

- ▶ used with nouns
e.g. *a successful approach*
- ▶ used with verbs like be, seem, appear, look, become
e.g. *the approach was successful*

► Adverbs

- ▶ used with verbs
e.g. *To date no study has convincingly demonstrated any possible association.*
- ▶ used with adjectives and other adverbs
e.g. *The calculations were only partially accurate.*

► Do not mix up:

- ▶ This is a remarkable, versatile technique.
= adjective + adjective: *The technique is remarkable and versatile.*
- ▶ This is a remarkably versatile technique.
= adverb + adjective: *The technique is more versatile than might be expected.*



Adverbials: position

▶ Sentence-initial / Mid-sentence / Sentence-final

e.g. *Recently a new method has been developed.*

A new method has recently been developed.

A new method has been developed recently.

▶ Mid-sentence position

▶ BEFORE THE MAIN VERB (other than 'be')

e.g. *This technique already offers a favorable combination of cost and accuracy.*

▶ AFTER 'TO BE' as main verb

e.g. *Age is also an important factor in these cases.*

▶ AFTER THE AUXILIARY

e.g. *This assumption has never been tested.*



Conditionals

Main patterns:

- ▶ **Zero conditional:** fixed connection between two events
e.g. *If the temperature **is** below 5°C, seeds **do not grow**.*
- ▶ **Predictive conditional:** likely connection between one event and another possible event *in the future*.
e.g. *If the results **are** encouraging, the study **will be** extended to other areas.*
- ▶ **Hypothetical condition:** distant and unlikely connection between imaginary events
e.g. *If the sample **was** bigger, generalisation **would be** possible.*
- ▶ **Counterfactual condition:** imaginary connection between events that never happened
e.g. *The study **would have been** much more persuasive if the author **had included** ...*



Conditionals

▶ Common error:

e.g. *If the sample ~~would be~~ bigger ...*

→ no will / would in if-clause

exception: polite requests / meaning is *be willing to*

e.g. *If you **will** come this way, ...*

▶ was vs. were in if-clause

e.g. *If the sample **was / were** bigger, ...*

→ both are correct: *were* is often used instead of *was* after *if*, particularly in formal styles



Relative clauses

RESTRICTIVE VERSUS NON-RESTRICTIVE

- ▶ **Restrictive** relative clauses (= defining)
 - ▶ add information that is essential **to identify the antecedent**
 - ▶ no commas
 - e.g. *My brother who lives in Paris is an architect.*
(you have 2 brothers)
- ▶ **Non-restrictive** relative clauses (= non-defining)
 - ▶ add extra information about the antecedent (not necessarily information you can just leave out > may be highly relevant, but not essential **to identify the antecedent**)
 - ▶ commas
 - e.g. *My brother, who lives in Paris, is an architect.*
(you have 1 brother)



Relative clauses

PRONOUNS

	People	Things
Subject	<i>who</i> <i>that</i> (restrictive only)	<i>which</i> <i>that</i> (restrictive only)
Object	<i>who / whom</i> <i>that</i> (restrictive only) \emptyset (restrictive only)	<i>which</i> <i>that</i> (restrictive only) \emptyset (restrictive only)
+ Preposition	<i>whom</i>	<i>which</i>
Possessive	<i>whose</i>	<i>whose / of which</i>



Relative clauses

► Common errors:

- ▶ the use of *who* instead of *which*

*A country **who** was particularly affected was China.*

*The result, **who** confirms earlier findings, shows...*

- ▶ the use of *that* in non-restrictive relative clauses

*The pattern, **that** repeats itself over and over, is shown to correlate with...*

- ▶ the use *what* instead of *which* to refer to the whole main clause (clausal pronoun)

*Standards are improving, **what** is perhaps not surprising.*



Dangling modifiers

Holmes provides the exception to this tendency. He poses the issue superbly in his chapter on the pharmaceutical industry.

Holmes provides the exception to this tendency, posing the issue superbly in his chapter on the pharmaceutical industry.

- ▶ Two sentences with the same subject:

- ▶ omit subject
- ▶ replace verb with -ing form
- ▶ comma between clauses

→ Useful for creating complex, but compact sentences



Dangling modifiers

- ▶ The understood subject of the participle clause should be the same as the subject of the main clause

* ***Reading the book, the issue became much clearer to me.***

- ▶ When I had read the book, the issue ...
- ▶ Reading the book, I thought that the issue became ...

* ***Having committed plagiarism, the professor had no option but to expel the student from university.***

- ▶ Since the student ..., the professor had no option but to ...

(→ dangling/unattached/hanging participle)



Dangling modifiers

Sometimes dangling participles can be acceptable:

- ▶ the understood subject is *one* or dummy *it*
e.g. *When trying to determine the cause, it is important to...*
- ▶ the participle clause follows the main clause and the understood subject is the content of the main clause
e.g. *He refused to accept the proposal, leading to protest from his colleagues.*
- ▶ in scientific writing when the subject is the writer
e.g. *Before going into detail, it may be useful to ...*



Dangling modifiers

- ▶ Some dangling participles have even become fully acceptable idioms:

e.g. judging from

strictly / generally / broadly speaking

taking everything into account / consideration



Inversion

- ▶ Inverted word order after negative or restrictive expressions

e.g. *It is not a refutation of the pluralist theory of the state. **Nor is it** a satisfactory basis for developing a dual thesis of the state.*

Not only has this narrow focus been misguided, but it has even been detrimental to the field.

Rarely has this involved investigating socio-economic or cultural aspects that might influence health.

Only when political participation is extended to a critical mass of citizens will economic inequality decline.

Never has it been easier for reporters, activists, investors and other critical observers to find fault with companies and their subsidiaries.



Inversion

- ▶ Inverted word order with as
 - e.g. *Austria experienced a considerable drop in fertility in the 1970s, as did most other industrialized countries at the time.*
- ▶ No inversion in English with fronted adverbials
 - e.g. *In these circumstances is controversy inevitable.*
→ *In these circumstances controversy is inevitable.*



Frequently confused pairs

- ▶ its ↔ it's

e.g. *Dutch flood risk management is unique in the sense that its focus is almost completely on prevention.*

It's these relationships and transformations that are important.

Also note the following common error:

It are these relationships ...

(it always followed by singular verb)

- ▶ than ↔ then (↔ as)

e.g. *The merged datasets are sorted and then the data are filtered.*

These measures would have more effect in the UK than in other countries.

Not: more effect as in other countries

→ The effect may not be as strong as previously assumed.

its = possessive ↔ *it's* = it is

than = comparative ↔ *then* = time indication

Frequently confused pairs

- ▶ there ↔ their

e.g. *However, **there** are relatively few studies available on the long-term effects.*

*Table 1 contains a summary of these studies and **their** main findings.*

- ▶ to ↔ too

e.g. *Goldman (2005) has come **to** a similar conclusion.
The dataset seems to be **too** limited.*

- ▶ who's ↔ whose

e.g. *Taylor (2007), **whose** findings suggested that ...
Taylor, **who's** well-known for his theory on ...*



there = place / existential contructions ↔ *their* = possessive

to = preposition ↔ *too* = also / too much

who's = who is ↔ *whose* = possesive

Frequently confused pairs

▶ briefly ↔ shortly ↔ in short

e.g. It is expected that a *National Solar Energy Plan* is to be implemented **shortly**.

*The following section will **briefly** focus on ...*

*In **short**, this study has shown that ...*

▶ number ↔ amount

e.g. *a large **number** of participants*
*a considerable **amount** of time*

▶ say ↔ tell

e.g. *When respondents asked for credentials, the interviewers **said** that they were not medically trained.*

*The interviewers **told** respondents that they were not medically trained.*



briefly = not extensively ↔ *shortly* = soon ↔ *in short* = the main point

number + countable, plural nouns ↔ *amount* + uncountable, singular nouns

Say is followed by the message (say sth to so); tell is followed by the addressee (tell so sth)

Frequently confused pairs

► economic ↔ economical

e.g. *The plan requires a more **economic** use of basic materials and fuels.*

*The IMF and World Bank have been crucial in the formulation of the country's **economic** policy.*

► rise ↔ raise

e.g. *Incidence and mortality rates **have risen** dramatically.*

*Combustion of coal, oil, and gas **has raised** the amount of carbon dioxide in the atmosphere.*

► at last ↔ lastly

e.g. *At last, governments appear to be taking the issue of global warming seriously.*

Lastly, the influence of global warming will be discussed.

economic = related to the economy ↔ *economical* = using resources carefully without waste

rise = go up, stijgen (*sth. rises* -> no object) ↔ *raise* = to make sth. go up, verhogen (*so./sth. raises sth.* -> + object)

at last = after a long time ↔ *lastly* = the last item in a list

Frequently confused pairs

▶ next to ↔ in addition to

e.g. *The boxes **next to** the figures display the effects of all variables used in the general linear models.*

*In **addition to** regulating long-term energy balance, leptin strongly affects neuronal activity.*

▶ considering (that) ↔ concerning

e.g. *This EU wide study is particularly timely **considering** the recent increase in bacteria resistant to even the most potent antibiotics.*

*The past several years have witnessed a growing debate **concerning** the effects of forest management.*



next to indicates position and nearness; *in addition to* introduces another aspect to be considered

Besides is similar to *in addition to* but less common; *apart from* and *except for* are often more appropriate than *besides*

Concerning = about, relating to, regarding, with regard to

Considering = given (that); indicates that you are taking a particular aspect into account when making a judgment

Frequently confused pairs

- ▶ subsequently ↔ consequently

e.g. *In-depth interviews were undertaken, which were **subsequently** analysed via an analytic induction method.*

*For some reason the formation and migration of neurons did not occur in other cultures. **Consequently**, these cultures were not analyzed more extensively.*

- ▶ critique ↔ criticism

e.g. *Bishop has published a **critique** of the virtual population method.*

*The main **criticism is** that the selected wavelengths are not very consistent.*

subsequently = following in time or order

consequently = it follows that, therefore

criticism = critical remarks ↔ *critique* = a critical assessment or analysis (more extensive than a few critical remarks) ↔ *critic* = someone who gives criticism, evaluates

Frequently confused pairs

▶ effect ↔ affect

e.g. *Increasing the concentration had no significant **effect** on the growth of lateral roots.*

*Magnesium concentration of the roots was minimally impaired, but that of the stems and leaves was strongly **affected**.*

▶ eventually ↔ possibly

e.g. *About 40% of the initial glucose was **eventually** consumed in the solid-state and liquid cultures.*

*A certain part of the parasites' population was **possibly** overlooked due to our method of sampling.*

▶ control ↔ monitor / check ↔ control for

e.g. *In order to **control** the operation speed of the wind turbine, a windshield is mounted on the fixed pole.*

*The processor uses the legal speed limit to **control** or **monitor** the speed of the vehicle.*

*To **check** the speed of the algorithm, we studied the collapse of a sphere.*

*To **control for** false positives, random sequences were included in the database.*



effect = noun ↔ *affect* = verb

eventually = ultimately, in the end ↔ *possibly* = perhaps

control = keep under control, regulate ↔ *monitor, check, verify, inspect* ↔ *control*

for = take steps to prevent

During / For / Since

- ▶ *During* refers to a period
e.g. *This technique was mainly used **during** the Second World War.*
- ▶ *For* refers to duration
e.g. *This technique has been used **for** several years.*
- ▶ *Since* refers to the starting point
e.g. *This technique has been used **since** the 1980s.*



Although / Despite / However

- ▶ *Despite* is followed by a noun phrase
 - e.g. **Despite** the success of this programme, a number of questions remain.
- ▶ *Although* is followed by a clause
 - e.g. **Although** this programme was successful, a number of questions remain.
- ▶ *However* is used in a separate sentence
 - e.g. This programme proved to be very successful.
However, a number of questions remain.



Due to / Thanks to / Because of

- ▶ *Due to* is used in negative contexts

e.g. *In most flowering plants, many embryos are aborted early in their development **due to** limited maternal resources.*

- ▶ *Thanks to* is used in positive contexts

e.g. *Scientific knowledge of marine systems is increasing rapidly **thanks to** recent advances in genetics, remote sensing, and geographical information systems.*

- ▶ *Because of, as a result of, owing to* are neutral

e.g. *because of local government policies / because of poor livestock management / because of excellent long-term results*



Like / As / Such as

► To express similarity

► Use *like* in combination with a noun phrase

e.g. *Unfortunately, like most metals, titanium exhibits poor osteoinductive properties.*

► Use *as* in combination with a clause (*like* in combination with a clause can be used in informal style)

e.g. *As was claimed by Jones, this can also be regarded as a consequence of the velocity profile.*

Avoid the following common error:

*As **it** was claimed by Jones, ...*



Like / As / Such as

- ▶ To express function or role

- ▶ Use as in combination with a noun phrase

e.g. *He has acted **as** a consultant to the European Commission and the OECD.*

- ▶ To give an example

- ▶ Use *such as* (*like* is used in informal style)

e.g. *The value of other policies, **such as** subsidizing and protecting new industries, is debatable.*



Both ... and / As well as

► Both X and Y

e.g. *This article will discuss the properties of **both** organic **and** inorganic spin-on polymers.*

► X as well as Y

e.g. *Continents have changed by horizontal **as well as** vertical motions.*

► Do not combine these two structures:

*both X as well as Y

e.g. *the properties of **both** organic **as well as** inorganic spin-on polymers*

► Avoid the following common error with as well as:

e.g. *Continents have changed **as well** by horizontal **as** vertical motions.*



Also

- ▶ *Also* generally occurs in mid-position
 - e.g. *The response rate **also** has a significant impact on Grant's findings.*
 - The role of global warming has **also** been widely discussed.*
- ▶ *Also* is sometimes used in sentence-initial position (followed by a comma), but only if it refers to the whole clause.
 - e.g. *Employing fuzzy arithmetic in such comprehensive matrices is computationally difficult and sometimes infeasible. **Also**, it is a time-consuming process.*
 - Also** the role of global warming has been widely discussed.*



Mid-position = before the main verb; after to be; after the auxiliary

Punctuation

- ▶ Decimal point vs. comma (used for thousands)
 - ▶ 3.45 (three point four five) ↔ 2,715 (two thousand seven hundred fifteen)
- ▶ Question mark
 - ▶ No question mark after indirect questions

Which factors are involved?

→ *This section investigates which factors are involved.*
- ▶ Colon
 - ▶ No capital letter after colon
 - ▶ What comes before the colon should be a syntactically complete structure (full sentence).

The causes of this disease are: stress, smoking and an unhealthy diet.

The causes of this disease are the following: stress, smoking and an unhealthy diet.

The causes of this disease are stress, smoking and an unhealthy diet.
 - ▶ Only one colon per sentence



Punctuation

- ▶ Comma
 - ▶ In general:
 - ▶ Commas create breaks in discourse and set apart information
 - Can have subtle effects on focus and meaning
 - ▶ Sometimes matter of personal style
 - ▶ A number of conventions / usage rules must be followed
 - ▶ Usage:
 - ▶ To separate **items in a list**.
e.g. *The side effects include insomnia, dizziness and nausea.*
(comma before *and*: optional, but sometimes needed to avoid ambiguity)
 - ▶ To **add information to the core sentence**
 - Before / after / middle



Punctuation

Commas to add information BEFORE the core sentence

- ▶ short initial elements: comma not needed
e.g. *For most children this is a very traumatic experience.*

EXCEPT:

- ▶ elements with a structural function (link words): use a comma
e.g. *Furthermore, ... / Nevertheless, ... / Consequently, ...*
- ▶ elements with an evaluative function: use a comma
e.g. *Surprisingly, ... / Obviously, ... / Unfortunately, ...*
- ▶ long initial elements (e.g. subordinate clauses): comma is advisable
e.g. *If we continue down this path, there will be severe consequences.*



Punctuation

Commas to insert information in the MIDDLE of the core sentence

- ▶ Use a comma **before and after** non-essential ‘interruptions’ of the core sentence.

e.g. *This is, however, not the best approach.*

Most emerging markets, for example India, offer excellent investment opportunities.

Jones was, rather surprisingly, the first researcher to refute this claim.

The results of this study, although quite interesting, are very difficult to generalize.

Hill, an expert in the field of biodiversity, supports this view.



Punctuation

Commas to add information AFTER the core sentence.

- ▶ Use a comma before a subordinate clause when it is backgrounded, not part of the main point.

e.g. *This is generally considered to be the most effective approach, although it is still quite controversial.*

Standards are improving, which is perhaps not surprising.

Perhaps the Mov-13 mutation is dominant, because the imbalance can disrupt more than one step in the biosynthetic pathway.

- vs. *Perhaps the Mov-13 mutation is dominant because the imbalance can disrupt more than one step in the biosynthetic pathway.*

The model is dominant because it is rather universal.

Instruction is more effective when students work in cooperative learning groups.



Punctuation

► Common errors

- Do not separate the subject from the verb.

e.g. *The most important factor to be taken into account, is the environment.*

- Do not separate the verb from the object.

e.g. *All reliable studies of this rare illness indicate, that it is highly contagious.*

- Do not use a comma before or after restrictive elements

e.g. *Studies, which investigate this issue, are quite rare.*

► Avoid comma splices:

e.g. *Our sales have increased by 30 %, our inventory has been reduced by 20%.*

... by 30%, but our ...

... by 30%; our ...

... by 30%. Our ...



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