Adrian Wallwork & Anna Southern

100 Tips to Avoid Mistakes in Academic Writing and Presenting

Springer

English for Academic Research

This series aims to help non-native, English-speaking researchers communicate in English. The books in this series are designed like manuals or user guides to help readers find relevant information quickly, and assimilate it rapidly and effectively.

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Introduction to the Book

Who is this book for?

RESEARCHERS – The book contains one hundred typical mistakes relating to papers, proposals, presentations, and correspondence with editors, reviewers and editing agencies.

EDITING AGENCIES – If you edit academic papers then you will find this book extremely helpful in learning how to correct the typical errors that academics make when writing - both in their manuscripts and in their correspondence with journals. These types of mistakes are listed below under the section *What kinds of mistake does the book focus on?*

JOURNAL EDITORS AND REFEREES – This book will help you make qualified judgments of whether the English of a paper really does require editing. Remember that papers can be delayed by reviewers making indiscriminate (and frequently unjustified) statements about 'poor English'.

TEACHERS OF EAP (ENGLISH FOR ACADEMIC PURPOSES) – you will learn which areas of writing and grammar to really focus on. If you also teach presentation skills, the last sections in the book highlight the key areas where presenters make the most mistakes.

This book can be used in conjunction with the other books in this series: https://www.springer.com/series/13913

What kinds of written mistakes does the book focus on?

The book focuses on modifications that increase readability and empathy for the reader, for example by

- ➢ rearranging the structure of a sentence or paragraph

- ➢ repositioning / highlighting key information so that it stands out clearly from the surrounding text

- ➢ deleting redundant words, phrases and sentences

- ➢ dividing up long complex sentences

- ➢ repunctuating so that the meaning is clearer

- ➢ always adopting a positive tone in emails and letters

It also deals with a few specific grammar and vocabulary mistakes, but only where such mistakes might confuse the reader (of a paper, email, proposal etc.) or listener at a scientific conference. If you are interested in learning how to avoid the most frequently made grammar and vocabulary mistakes then you can consult:

Top 50 Vocabulary Mistakes
https://www.springer.com/gp/book/9783319709802

Top 50 Grammar Mistakes
https://www.springer.com/gp/book/9783319709833

Although the above two books focus on mistakes regarding general English rather than specifically academic English, there is much overlap between the two types of English. If you need grammar explanations that are specific to academic English then the following book will be very useful for you:

English for Academic Research: Grammar, Usage and Style

https://www.springer.com/gp/book/9781461415923

And if you want to do exercises in relation to the errors covered in this book, then try these three books:

English for Academic Research: Writing Exercises

https://www.springer.com/gp/book/9781461442974

English for Academic Research: Grammar Exercises

https://www.springer.com/gp/book/9781461442882

English for Academic Research: Vocabulary Exercises

https://www.springer.com/gp/book/9781461442677

How is the book structured?

The book is made up of 100 sections, divided up as follows:

Research Papers: Titles and Abstracts

Research Papers: Introduction and Literature Review

Research Papers: Methods, Results, Tables

Research Papers: Discussion, Conclusions, Review Articles

Readability and Avoiding Redundancy

Word Order, Sentence Length and Paragraphing

Punctuation, Spelling, Google

Project proposals, journal submissions, emails in general

Presentations

Within each section there are several examples given. Each example is organized as follows:

Title: This is either a tip on how to avoid a mistake, or a warning of a typical mistake.

 NO! Examples of typical mistakes. **YES!** Corrected versions.

MISTAKE A description of why the NO examples are mistakes. Followed, in many cases, by an analysis of each individual mistake.

SOLUTION An explanation of how not to make the mistakes.

IMPACT A more general explanation of the negative impact that a particular mistake could have on the reader (including editors, reviewers, recipients of emails) or listeners (at a conference). And also an explanation of how the solution can have a positive impact.

Notes:

- The NO examples are authentic, i.e. they were taken from real papers. Consequently, they may contain additional mistakes (spelling, punctuation, grammar), not just those that are the topic of a particular section in the book. This means that you can also use the book to see if you are able to i) identify other kinds of mistakes ii) correct them. You can do this by covering the YES version and then attempt to edit / correct the NO version.

- In some cases there is no IMPACT section because the impact is clear or is very similar to the impact of the previous subsection. And in the case of presentations, sometimes just the KEYS are given, i.e. explanations for the way particular slides are used.

- *Italics* are used in the examples to highlight the points made in the MISTAKE and SOLUTION sections. Thus they are <u>our</u> italics, not the author of the paper's italics.

- A bomb icon (💣) is used to indicate the most important tips and 'serious' mistakes in the book. This choice is <u>highly subjective</u> but is based on our agency's 30-year experience of editing scientific research papers. They are 'serious' in terms of how likely they are to create major confusion for the reader or undermine the credibility of the author or presenter. We are thinking primarily in terms of how well the message of your paper or presentation comes across to the reader, or how likely your paper or proposal is to be accepted for publication or funding.

Free downloadable materials

For more materials you can access: https://e4ac.com/english-for-research/
Under the name of this book, i.e. *100 Tips to Avoid Mistakes in Academic Writing and Presenting*, you will find:

- larger and clearer versions (in color) of the slides shown in the last section of this book

- additional mistakes plus analysis

- updates

You can also find details about the other books in this series as well as details of our editing agency (including costs of having your papers edited) and our courses.

Contents

Chapter 1
Research Papers: Titles and Abstracts

1 Whole paper: Concentrate above all on readability; grammar is generally less important. 💣☼

MISTAKE I have surveyed thousands of PhD students about what they consider to be the fundamentals of writing research papers in English. While some recognize that readability should be prioritized (i.e. minimizing long sentences and redundancy), most tend to focus on grammar and vocabulary. Few mention conciseness and even fewer mention ambiguity. In my opinion, it is a mistake to think that good grammar and appropriate vocabulary are the key to a good paper. There are other elements, including the ones listed below, that are much more likely to determine whether your paper will be accepted for publication, and which have a big impact on what a reviewer might refer to as 'poor English'. This whole book is designed to help you understand what areas you should really be concentrating on.

SOLUTION

- Always think about the referee and the reader. Your aim is to have your paper published. You will increase your chances of acceptance of your manuscript if referees and journal editors (i) find your paper easy to read; (ii) understand what gap you filled and how your findings differ from the literature. You need to meet their expectations with regard to how your content is organized. This is achieved by writing clearly and concisely, and by carefully structuring not only each section, but also each paragraph and each sentence.

- In your own native language, you may be more accustomed to write from your own perspective, rather than the reader's perspective. To write well in English, it may help you to imagine that you are the reader rather than the author. This entails constantly thinking how easily a reader will be able to assimilate what you the author are telling them.

- Write concisely with no redundancy and no ambiguity, and you will make fewer mistakes in your English. The more you write, the more mistakes in English you will make. If you avoid redundant words and phrases you will significantly increase the readability of your paper.

- Read other papers, learn the standard phrases, use these papers as a model. You will improve your command of English considerably by reading lots of other papers in your field. You can underline or note down the typical phrases that they use to express the various language functions (e.g. outlining aims, reviewing the literature, highlighting their findings) that you too will need in your paper. You can also note down how they structure their paper and then use their paper as a template (i.e. a model) for your own.

IMPACT

If your paper is relatively easy to read and each sentence adds value for the reader, then you are much more likely to be cited in other people's work. If you are cited, then your work as an academic will become more rewarding - people will contact you and want to work with you.

More details about readability and being concise can be found in Sections 31-56.

2 Titles: Ensure your title as specific as possible. Delete unnecessary words. 💣❄

NO!	YES!
1) *The design of* an XYZ system for implementing ABC.	An XYZ system for implementing ABC.
An investigation into the modeling of the XYZ process.	An ABC for modeling the XYZ process.
The development of an XYZ tool for predicting ABC.	An XYZ tool for predicting ABC.
A study of a novel ABC system.	Integrating XYZ into an ABC system.
Some insights into XYZ.	XYZ - is it really the best method for solving ABC?
2) Se nanoparticles treatment of tomato *as a tool to* prolong the shelf life of the fruits.	Treating tomato with Selenium nanoparticles prolongs the shelf life.
3) Selenium enrichment *affects* the quality and post-harvest storage of basil leaves.	Selenium enrichment enhances the quality of basil leaves and increases post-harvest storage by up to five days.

MISTAKE Titles are often written without too much thought. The result is vague titles that don't give much information to the reader, and consequently dramatically decrease the chances of your paper being read. A paper might be rejected simply because the title and the content of the paper do not match. The title is the first thing that reviewers read, so you don't want to mislead them. In fact the title tends to be the benchmark against which reviewers assess the content of the paper.

Example 1: The first 3-4 words of all these titles give no information. By deleting these no-info words, the key words (ABC and XYZ) are shifted to the beginning of the title.

Example 2: *as a tool to* could simply be replaced with *to*. In the YES example, the title has been reformulated into a statement / conclusion. This can be a really effective way to tell readers what your main finding is. But check other titles in your journal to see whether such statements are used by other authors (some editors don't like this style).

Example 3: The NO example seems specific, but it isn't. It doesn't say *how* it *affects* quality and storage.

SOLUTION Before you write your title, make a list of all the key words associated with your paper and your key findings (i.e. what makes your research unique). Put these key words and findings in order of priority. Now try to put the most important key word(s) as close as possible to the beginning of the title. Next ensure that the resulting title contains a definite and concise indication of what is written in the paper itself and somehow includes your key finding. Consider avoiding acronyms and abbreviations (*Se* = selenium, but Google Scholar and other indexes may not know this).

IMPACT The title should contain as many key words as possible to help both the reader and search engines identify the key concepts. By including, if you can, your key finding(s) in your title you will have created a mini abstract that helps the reader to understand the importance of your paper.

You may find the following books helpful when writing a research paper:

English for Writing Research Papers
https://www.springer.com/gp/book/9783319260921
English for Academic Research: Writing Exercises
https://www.springer.com/gp/book/9781461442974
English for Academic Research: Grammar Exercises
https://www.springer.com/gp/book/9781461442882
English for Academic Research: Vocabulary Exercises
https://www.springer.com/gp/book/9781461442677

3 Titles: Avoid 'clever' titles.

NO!	YES!
1) A hidden world inside rice seeds: Indol acetic acid production and amylase activity from endophytes bacteria.	Indol acetic acid production and amylase activity from endophytes bacteria. Indol acetic acid production and amylase activity from endophytes bacteria: the hidden world inside rice seeds.
2) First insights into the enhancement of insecticide activity by a physical mixture with cyclodextrin: a wizard's cauldron or a chance to explore?	A physical mixture with β-cyclodextrin enhances the insecticide efficacy of Diflubenzuron. Enhancing insecticide activity using a physical mixture with cyclodextrin: a witch's cauldron or an opportunity?

MISTAKE

Example 1: The NO example is correct, but the first words don't really give an idea of what the paper is about. Moreover, no search engine is going to be looking for 'hidden world' as a key word. If you really want to use such a device, then put it at the end of the title. This creates a two-part title (second YES example) using a colon in the middle. This is a very useful means to shift key information to the beginning, but still retain a more fun or colloquial tone.

Example 2: The NO example is not a great title: i) it begins with a generic expression (*first insights*) and the second part contains a vocabulary mistake (it should be *witch's* not *wizard's*) and what does *a chance to explore* mean? Making mistakes with vocabulary is typical when you try to write a non-technical title. The result is that you give readers an initial bad impression, which may discourage them from reading the rest of the paper. And how many non-natives are going to know what a *witch's cauldron* is?

SOLUTION AND IMPACT Show your title to as many of your colleagues as you can. Ask them if they can improve it by making it more specific and so that it will immediately make sense to the editor and reviewers. Note: If you are particularly pleased with your title because to you it sounds clever or witty, consider rewriting or at least check that other people agree with you!

4 Abstracts: Be concise - especially in the first sentence.

NO!	YES!
Worldwide there are millions of daily smokers who consume trillions of cigarettes. This determines that cigarette butts are one of the most common types of litter in the world, present in any environment, from the sea to the mountains and from the countryside to the city. These, due to the materials and toxic substances that they contain, are waste with a very high damaging potential for the environment and for living organisms. The solutions applied to try to combat it are still few and scarcely sustainable and, therefore, alternative solutions to landfilling or incineration practices are necessary.	Trillions of cigarettes are smoked daily, making cigarette butts one of the most common types of litter in the world. Due to the materials and toxic substances that they contain, this waste has a very harmful risk for the environment and for living organisms. A few barely sustainable solutions have tried to combat this waste and alternative solutions to landfilling or incineration are needed.

MISTAKE The style of an abstract likely reflects the style of the whole paper. Readers may find the NO! style confusing and thus the essence of the meaning is lost. They may also think that if the abstract is full of redundant words, then the rest of the paper is likely to be full of redundancy too. Readers may thus decide not to read the paper.

SOLUTION Only provide the reader with what is strictly necessary. Reducing the number of words will also help you meet the word count set by the journal (i.e. the maximum number of words that you can use in an abstract).

IMPACT The YES! version is more concise, dramatic and memorable, but with no loss of information. It contains 30% fewer words - this will enable you to i) respect the journal's word count requirements of the abstract; ii) free up more space for providing extra details. You want your Abstract to seem professional. If the English is poor and there is much redundancy the reader may see this as a sign of unclear thinking (as well as unclear English) and may then even doubt the whole research method.

5 Abstracts: Don't begin the abstract with non key words.

NO!	YES!
During the last 50 years, research has focused on the development of an effective control algorithm for prosthesis application.	An effective control algorithm for prosthesis application has been the subject of research for around 50 years.
This paper was aimed at assessing retrospectively the rate of paroxysmal sympathetic hyperactivity using the Paroxysmal Sympathetic Hyperactivity— Assessment Measure (PSH-AM) scale in patients with severe consciousness disorders.	The rate of paroxysmal sympathetic hyperactivity was retrospectively assessed using the Paroxysmal Sympathetic Hyperactivity—Assessment Measure (PSH-AM) scale in patients with severe consciousness disorders.

MISTAKE The first line of the abstract is likely to be the first sentence of your paper that the reader will read. If they see a series of words (in italics in the NO! example) that give no indication as to what you did and found in your research, they may stop reading.

SOLUTION Shift key words/info to the beginning. Reduce the number of non-key words, i.e. words that do not add value for the reader

IMPACT If the reader sees the key words and key concepts immediately, they will be encouraged to read the rest of the Abstract, and hopefully the rest of the paper.

6 Abstracts: Make it clear why the purpose of your investigation is important.

NO!	YES!
Olive leaf extracts are of special interest for their proven therapeutic effects although still considered a by-product of table olive and oil industry. *The purpose of this research was to investigate* phytochemical profiles and antioxidant activities in leaves of 15 Italian Olea europaea L. cultivars grown in the same pedoclimatic conditions. *In order to exploit a waste product, the phenolic profiles and* the amount of their seven representative compounds were analyzed by HPLC.	Olive leaf extracts have proven therapeutic effects. However, they are still considered a by-product of the table olive and oil industries. *In order to learn possible ways of exploiting this waste for health purposes, we investigated* the phytochemical profiles and antioxidant activities in the leaves of 15 Italian Olea europaea L. cultivars grown in the same pedoclimatic conditions. The phenolic profiles and amounts of their seven representative compounds were analyzed by HPLC.

MISTAKE In the NO example the reader is told the purpose of the research, but not the reason why this purpose is important.

SOLUTION Don't just tell the readers what you did, but also why you did it. Do this within the first three sentences of the abstract. Keep the sentences short - this will help to highlight the importance of what your research involves.

IMPACT If you tell your readers near the beginning of the abstract why you carried out your research, they are more likely to continue reading. If you just give them background info or make them wait too long before they discover the rationale underlying your research objectives, readers may simply stop reading.

7 Abstracts: Clearly differentiate between the state-of-the-art and what you did in your research. 💧💧

NO!	YES!
The frequency of online racist attacks during the first outbreak of Covid-19 in 2020 *enable* the classification of three types of political and social actors posting on social media. These types *are*: i) conspiracy theorists, the alt-right in the USA, and right-wing movements in Europe. The frequency of the postings *have been calculated* by executing CFD transient analyses which *are commonly used* in analysing racist statements. Finally, the power *is highlighted* of the social networks to destroy the lives of innocent people.	**We used** the frequency of online racist attacks during the first outbreak of Covid-19 in 2020 to identify three types of political and social actors posting on social media. These types *were found to be*: i) conspiracy theorists, the alt-right in the USA, and right-wing movements in Europe. **We calculated** the frequency of the postings by executing CFD transient analyses, which *are commonly used* in analysing racist statements. Finally, **we highlighted** the power of the social networks to destroy the lives of innocent people. **In this paper**, the frequency of online racist attacks during the first outbreak of Covid-19 in 2020 *was used* to identify three types of political and social actors posting on social media. These types *were found to be*: i) conspiracy theorists, the alt-right in the USA, and right-wing movements in Europe. The frequency of the postings *was calculated* by executing CFD transient analyses, which *are commonly used* in analysing racist statements. Finally, the power of the social networks to destroy the lives of innocent people *was highlighted*.

MISTAKE In the abstract above, the authors were trying to describe their own work, i.e. what they did during their research. However, their style is confusing. In fact, in the NO version, the reader cannot be clear whether the authors are talking about their work or another author's work. This is because they use the passive form, and they use the present tense indifferently whether they are talking about their work or other people's work. By convention the past simple rather than the present simple is used to indicate what you did (as opposed to what is already known - present tense).

SOLUTION If your journal allows, use the personal form *we*. You can use it in combination with phrases such as *in this work / paper / study*, and *this work / paper / study shows that* ... Use the past simple (*were calculated*, rather than the present *is calculated* or the present prefect *has been calculated*) to indicate what you did.

There are two solutions shown in the YES column. The first YES solution is written in a personal style using *we* and the verbs that describe what the authors did are in the past form. The reader is thus certain that the authors are talking about their work.

The second YES solution is written in an impersonal style using the passive form. However, it is still relatively clear when the authors are talking about their work (they use the past tense) and when they are talking about other researchers (they use the present tense, e.g. CFD transient analyses which ***are*** *commonly used* in analysing racist statements).

IMPACT If it is clear to the reader what your particular contribution is, he/she is more likely to continue reading the paper. This factor is even more important for the reviewers of your paper. If they don't understand what you did and how you are filling the gap in the state of the art, then they will be less inclined to recommend your paper for publication.

8 Structured Abstracts - Background: Be careful of tense usage.

NO!	YES!
Background: Plasma clearance of iohexol *proved* to be a reliable and relatively inexpensive method for glomerular filtration rate (GFR) evaluation in different veterinary species, included horses. In humans and dogs, aging *resulted* in a progressive decline in GFR, as a result of modifications in renal architecture and reduction in renal reserve. The relationship between aging and GFR has never been investigated in horses.	Background: The plasma clearance of iohexol *has proved* to be a reliable and relatively inexpensive method to assess the glomerular filtration rate (GFR) in several veterinary species, including horses. In humans and dogs, aging *leads* to a progressive decline in GFR, as a result of modifications in renal architecture and reduction in renal reserve. The relationship between aging and GFR *has never been investigated* in horses.

MISTAKE This section is entitled Background, so you are not talking about what you did in your research, but about the state of the art, i.e. what we know at the moment. Thus 'has proved' indicates the situation until now, whereas the past tense (*showed*) would imply that you made this discovery. Likewise, *aging resulted* implies that you are talking about your work, whereas *leads to* means that you are talking in general, i.e. what is already known. On the other hand *has never been* is correct because it means from the past until now, and it implies that in this paper this topic will be investigated for the first time.

SOLUTION For details on tense usage in Abstracts and background information see:

English for Writing Research Papers

https://www.springer.com/gp/book/9783319260921

IMPACT If you use the correct tenses, readers will not be confused between what other researchers have done and what you did.

9 Abstracts: When writing a single paragraph, write it like a 'structured abstract'. ☄☀

NO!	YES!
In this paper we investigate whether clomiphene citrate (CC) treatment affect the biosynthesis and metabolism of both sexual hormones and glucocorticoid in functional obese hypogonadal men, considering the presence of both LH and estrogen receptors on both the gonadal and adrenal glands. CC treatment in functional male hypogonadism has been shown to increase endogenous serum T and estrogen levels by stimulating Luteinizing Hormone (LH) and Follicle Stimulating Hormone (FSH) secretion from hypothalamus and pituitary gland. We observed that the fold changes induced by CC compared with those observed after Plac, were significantly higher for ..	In this paper we show that CC therapy can stimulate the steroidogenesis both in the testis and in the adrenal gland, as was proved by the rise in serum testosterone (T) and cortisol (F) levels in all our participants. Furthermore, ... CC treatment in functional male hypogonadism has been shown to increase endogenous serum T and estrogen levels by .... We adopted a randomized cross-over double blind controlled study (RCT) using ... A total of 21 out of the 24 enrolled obese hypogonadal men concluded the study. Inclusion criteria were: ...We observed that the fold changes induced by CC compared with those observed after Plac, were significantly higher for .... Although this study is the first to detect an effect of CC on both testicular and adrenal steroidogenesis. However, ... In conclusion, CC is able to increase T production in obese dysnetabolic hypogonadal patients and should be considered as ...

MISTAKE One of the biggest mistakes in writing an abstract is to forget that the abstract is a summary of the entire paper. The NO! example is little more than an introduction to the topic with some results. The author has forgotten to mention the methods, limitations and implications. Note however that not all journals require you to mention the limitations and implications in your abstract.

SOLUTION To avoid this problem, imagine that you are writing a structured abstract. If you answer the questions / headings typically used in a structured abstract, then you will remember to include everything. You will then produce an abstract like the YES example in the left-hand column.

EXAMPLE OF STRUCTURED ABSTRACT

Summary answer: CC therapy can ... Furthermore, ...

What is known already: CC treatment has been shown to....

<u>Study design, size, duration</u>: This was a randomized cross-over double blind controlled study (RCT) using ...

<u>Participants/materials, setting, methods</u>: 21 out of the 24 enrolled men concluded the study. Inclusion criteria were: ...

<u>Main results and the role of chance</u>: We observed that....

<u>Limitations, reasons for caution</u>: This study is the first to ... However, ...

<u>Wider implications of the findings</u>: CC is able to increase T production and should be considered as ...

IMPACT Readers read an abstract to understand what the <u>whole</u> paper is about. By using a structured abstract as a template you will provide readers and reviewers with all the standard information that is required.

10 Abstract and Introduction: Avoid the word 'attempt' and avoid making bold statements beginning with 'this is the first …".

NO!	YES!
This study is the first attempt to address a fundamental question: How does color impact on human decision marking?	To the best of our knowledge, this study is the first to address the following fundamental question: How does color impact on human decision making?

MISTAKE The word *attempt* is a little misleading - it suggests that you tried to do something but doesn't tell the reader whether you actually succeeded or not.

Saying *this is the first time* … may be dangerous because you can rarely be 100% sure that you are the first to do something.

SOLUTION Remove *attempt*. Precede *this is the first time* with one of the following: *to the best of our knowledge … we believe that … as far as we are aware …*

IMPACT By removing *attempt* you clarify for the reader that you succeeded in your task. By adding *to the best of our knowledge* you protect yourself from possible criticism by the reviewers that in reality this is not the first time. If your overall tone is confident but not arrogant, you will gain the trust of your readers.

Chapter 2
Research Papers: Introduction and Literature Review

11 Introduction: Avoid information that readers will already be very familiar with.

NO!	YES!
The new technological paradigm and improved internet connections have rapidly changed the way users behave and interact with each other and with technology. These changes have not only influenced the behavior of consumers but have also triggered extensive organisational transformations by firms. Consequently, firms have begun to reinterpret their internal business models in various sectors including manufacturing in order to boost their competitiveness within the new global scenario. According to the European Commission (2020), by adopting and investing in digital technologies, SMEs can grow two to three times faster. In the manufacturing sectors, Industry 5.0 may generate yearly efficiency gains of between 6% and 8% (European Parliament, 2021), and the absorption of digital technologies has already explained almost one third of the growth of the overall industrial production in Europe (European Commission, 2022).	The economic system in Greece is principally made up of small and medium enterprises, mostly family-owned. According to the European Commission (2020), by adopting and investing in digital technologies, such SMEs can grow two to three times faster. In the manufacturing sectors, Industry 5.0 may generate yearly efficiency gains of between 6% and 8% (European Parliament, 2021), and the absorption of digital technologies has already explained almost one third of the growth of the overall industrial production in Europe (European Commission, 2022).

NO!	YES!
The current fourth industrial revolution - also known as Industry 5.0 - involves substantial innovations in technology for use by firms. For instance, among the new technologies, the Internet of Things and cloud computing are considered to be the most important, capable of generating digitized and inter-connected supply chains as well as integrated ecosystems which bring increasing product and process innovations.	
The Greek economic system is constituted by a prevalence of small and medium enterprises, which are mostly family-owned.	

MISTAKE The above is from a paper on family businesses in Greece. It was submitted for publication in a reputable economics journal. The extract is from the Introduction and gives a lot of information (see italics) that readers will be familiar with - even those readers with little knowledge of economics but who simply read the newspapers. Thus the information gives no value to the reader, who is thus likely to start skipping sentences and then whole paragraphs. Obviously you don't want to encourage your readers to start skipping sentences and paragraphs early on in the paper, otherwise they will continue this behavior throughout the rest of the paper. And if they do, they may miss the essential new information that your paper provides. As a consequence, you will lose your credibility and your readers will lose their interest.

SOLUTION Cut any information that would be familiar even to a general reader, e.g. non-specialists in your field.

IMPACT Your readers will be encouraged to read carefully rather than skimming and possibly stopping reading completely.

12 Introduction: Describe the structure of your paper in a way that enables readers to navigate the paper easily.

NO!	YES!
This paper is primarily focused on naturally occurring calcium oxalate films, and describes what emerges from literature, starting with insights into the compositional and morphological features of layers, which can be investigated by the use of several analytical and mineralogical techniques *(section "Composition and characterisation"). The paragraph "Distribution"* illustrates the various substrates (marble, limestone, wall and easel paintings, mortars, written materials, and glass) that have been documented. *The penultimate paragraph ("About the origin")*, considers the alternative hypotheses on the atmospheric origin of oxalic acid or a combination of the anthropogenic and natural standpoints previously described. *Finally, the concluding section ...*	This paper focuses on naturally-occurring calcium oxalate films, and describes the findings in the literature. *Section 2* discusses the compositional and morphological features of layers, which can be investigated using various analytical and mineralogical techniques. *Section 3* outlines the various substrates (marble, limestone, wall and easel paintings, mortars, written materials, and glass) described in the literature. *Section 4* also discusses alternative hypotheses on the possible atmospheric origin of oxalic acid or a combination of the anthropogenic and natural standpoints previously described. Finally, *Section 5* ...

MISTAKE The Introduction typically ends with a description of how the rest of the paper is organized. This helps the reader to navigate your paper. The NO example is likely to confuse the reader.

SOLUTION Before you submit your paper, look at how you have described the structure. If you have not described it clearly, this could even be an indication that the paper itself is not organized very well. If your paper does not follow the usual structure: *Introduction / Methods / Results / Discussions / Conclusions*, then use numbered headings. If you don't use numbers, then it is difficult for the reader to find the sections quickly. Even if you follow the usual structure, in a long paper it helps if you provide subheadings, for instance in the Results in which you are describing the results of various different tests that you made, or in the Discussion when you are interpreting these tests. In such cases, you can give each test a heading.

IMPACT If this part of your paper is badly organized, then the reader is likely to think that the rest of the paper is badly organized too. Compare NO and YES. The first is confused and has no section numbers. The second is much clearer and also a little shorter, though with no loss of content. The result is that reading your paper is more likely to be an enjoyable experience for your readers.

13 Review of the literature: prioritize clarity over consistency when deciding what tense to use.

MISTAKE A typical mistake in writing the review of the literature is to think that all the verbs must be in the same tense. In reality the tenses (highlighted in ***bold italics***) in the three examples below can all be justified.

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1) PRESENT + PRESENT In December 2018 at an extremely crucial COP24 meeting, the U.S., Russia, Saudi Arabia, Brazil, and Kuwait did not "welcome" the warnings of the preeminent scientists and researchers across the world; they just "noted" them. With sadness, two of the authors of that IPCC report ***write*** that climate change ***is*** a "problem of politics, not science" (Kejun & Masson-Delmotte, 2018).

2) PAST + PRESENT PERFECT … two of the authors of that IPCC report ***wrote*** that climate change ***has been*** a "problem of …

3) PAST + PAST … two of the authors of that IPCC report ***wrote*** that climate change ***was*** a "problem of …

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1) This form is acceptable to describe a fairly recent event with respect to when the paper was written (in this case in January 2019) and thus the use of the present underlines the current urgent nature of the situation.

2) The past tense is used for the verb *write* (the same would be true of similar introductory verbs such as *propose, claim, suggest, indicate*). This is probably the most used tense for an introductory verb, and if you are in doubt I suggest you use it. In the example, the present perfect is used in the second part. The present perfect indicates something that began in the past and is true today. Like 1) this usage is fine for a paper reporting on a very recent event. However when writing your paper you should always bear in mind that the person reading it, might be reading it ten years in the future, so the use of the present or present perfect may sound a bit strange. For the same reason, you should probably avoid words like *recent(ly), in the last few years* etc

3) If the paper was written in January 2019 (note that the meeting was in December 2018), this form may seem a bit strange because *was* implies that maybe the problem has been resolved or the situation has changed.

SOLUTION There is no simple solution. If you are worried that using the present tense (as in 1) may be misleading, then you could add a phrase saying 'at the time of writing' which indicates that you are talking about 2019 even though your reader may be reading this in 2029 or 2039. Unless you have reason to do otherwise, I would always adopt the past + past formula, unless using the past in the second part could lead to ambiguity.

In any case, all three forms can be justified within the same Introduction. You do NOT have to just adopt one form. Clarity (i.e. helping the reader understand clearly what you mean) should always be prioritized over consistency (always using the same form).

14 Review of the Literature and Discussion: Think about whether the first few words of a sentence add value for the reader or not. Be as concise as possible.

NO!	YES!
A wealth of publications and researches demonstrated that chemical knowledge of organic materials present as binders, varnishes or pigments requires …	Organic materials present as binders, varnishes or pigments can be understood by …
In a comprehensive study performed by Kokkori [38] Electron Spray Ionisation was used to characterize …	Kokkori [38] used Electron Spray Ionisation to characterize …
Over the last few decades of food traceability studies, empirical research …	Recent empirical food traceability research has …
Analytical pyrolysis is nowadays showing previously unexplored potentialities, also thanks to recent instrumental developments. A novelty in this context is the thermal separation probe (TSP) …	Analytical pyrolysis has been enhanced by new technologies such as the thermal separation probe (TSP) …
A debate emerges from a part of the reviewed literature with regard to whether calcium oxalate films protect the surface or ..	Some authors have questioned whether calcium oxalate films protect the surface or …

MISTAKE The literature review is possibly the least interesting part of the paper to read. However, this review is important as it sets the context for how your research fills a gap. If you fill the review with redundant phrases, readers are less likely to appreciate how your work advances the state of the art.

SOLUTION Re-read what you have written imagining that i) you are the reader; ii) the journal insists that you reduce the word count by 20%. In addition, make sure you have grouped previous work by topic and that after each group description you have made a clear comparison with your own work. Commenting on a poorly-written literature review, a referee stated: *The conceptual background is difficult to read. Although the authors referred to by the authors are the correct ones, they should nevertheless group the comments by topic. At the moment it gives the impression of random jumping from author to author with no clear development of the literature.*

IMPACT By eliminating redundancy your readers will be able to see the context of your research and the differences between your work and previous work by others. This will also enable reviewers to assess the scientific value of your work. It will also help your work to be more memorable for your readers.

15 Review of the literature and Discussion: Delete all unnecessary verbs.

NO!	YES!
Betulone and betulinic acid *are known to be* characteristic of birch bark [23].	Betulone and betulinic acid *are* characteristic of birch bark [23].
The use of resins and wood from birch, pine and fir to produce tar and pitch *has been ascertained* in various regions of Europe and the Mediterranean [24].	Resins and wood from birch, pine and fir *were used* to produce tar and pitch in various regions of Europe and the Mediterranean [24].
In the literature the detection of birch-bark pitch *has also been reported* in ceramic artifacts and its function *has been attributed* to adhesives in order to seal, repair or to coat the inner surfaces of the vessels [25].	Birch-bark pitch *has also been identified* in ceramic artifacts as an adhesive to coat, seal, or repair the inner surfaces of the vessels [25].
Also plant gums such as arabic gum, which is mainly composed of polysaccharides, *have been reported* to contain a minor proteinaceous fraction [26].	Also plant gums such as arabic gum, which is mainly composed of polysaccharides, *contain* a minor proteinaceous fraction [26].

MISTAKE All these sentences come from the same review of the literature. The review was over eight pages long. This means that the reader is forced to read a series of verbs that all have the same meaning even though synonyms are used in each case (thus stretching the author's knowledge of English vocabulary!). Given that in each case a reference is given (i.e. this is knowledge acquired from the literature, not your own findings), there is no need to use such verbs as *ascertain, report, state*. Instead these verbs can usually be deleted.

SOLUTION The YES examples highlight how you can remove 20% of the words, but still give exactly the same information. At the same time, you need to show how various groups of authors i) relate to each other ii) relate directly to your work (i.e. what didn't they do in their research that you have done in your research and thus what gap have you filled). You can do this by grouping papers together, and each time making a comparison with your own work. Then you move onto the next group of papers, and follow it with another comparison, etc.

IMPACT Never force your reader to read unnecessary words (in this case verbs). Reading a literature review can be tedious; and if one in five words is also redundant and there is little or no organized comparison with your own work, the reader may simply stop reading. You need to ensure that your contribution stands out and does not disappear in a mass of other research.

Chapter 3
Research Papers: Methods, Results, Tables

16 Methods: Use the past to describe what you did, but use the present to describe any protocols / regulations / typical steps.

NO!	YES!
We *use* the Dictator Game to study our subjects' behavior towards others. In the dictator game, each subject *is* randomly matched with another subject and *is* given a certain amount of money. In our study, the subject *is* asked to allocate the money to … The money given to each recipient *is then multiplied* by a factor R.	We *used* the Dictator Game to study our subjects' behavior towards others. In the dictator game, each subject *is randomly matched* with another subject and *is given* a certain amount of money. In our study, the subject *was asked* to allocate the money to … The money given to each recipient *was then multiplied* by a factor R.

MISTAKE The NO example uses the simple present for all five verbs. It is thus hard to distinguish between what the general rules of the Dictator Game are, and what actually happened during the author's experiments.

SOLUTION In the YES example, the present is only used for two verbs (*is*). These two verbs do not refer to any decisions made by the author. Instead they refer to the standard rules of the game, which do not change over time, and thus should be reported using the present.

IMPACT Using the correct tense helps readers to differentiate between what is normal practice (present tense) and what you yourself did in the lab (past tense). Without this differentiation, readers will be confused.

If the reader cannot quickly understand which method is yours, this will undermine the entire point of the paper.

17 Methods: Be careful to use the right tense in a *which* clause when a series of steps are being described.

NO!	YES!
The ethyl acetate *phase, dried under a gentle stream of nitrogen, was* dissolved in 50 ml of eluent B.	The ethyl acetate phase, *which had been dried* under a gentle stream of nitrogen, was dissolved in 50 ml of eluent B.
	The ethyl acetate phase *was dried* under a gentle stream of nitrogen, *and was then* dissolved in ...

MISTAKE In the NO example *dried* and *dissolved* are both in the same tense. They reader may thus think that these two verbs describe two almost contemporary actions with the first taking place before the second. In reality, the author carried out the dissolving phase before the drying phase.

SOLUTION The first YES example uses the past perfect (*had been*) to indicate that the action of drying took place before the action of dissolving. The second example is probably clearer as the first action (*dried)* is mentioned in the sentence before the second action (*dissolved*).

IMPACT Readers should be able to replicate your methodology. It thus makes sense for you to describe the various steps in chronological order.

18 Methods: Indicate the sequence of steps by putting *firstly, secondly, finally* etc at the beginning of the sentences.

NO!	YES!
The composite can be *finally* filled with powder and particulates.	*Finally*, the composite can be filled with powder and particulates.

MISTAKE AND SOLUTION When you are listing the steps in your Methods, typically you may use words such as *first/firstly*, *second/secondly*. These words, including *finally* (and *lastly*) should go at the beginning of the sentence. Another issue is that when *finally* is placed after the subject in the sentence it takes on a slightly different meaning - 'after a series of problems' (cf *We finally arrived at the destination after 10 hours waiting in a queue* - annoyance *Finally, we arrived at our destination where we were met by our hosts* = neutral fact). Note: *then* tends to go after rather than before the subject when describing methods: *We then dissolved the particles* is more common than *Then, we dissolved the particles*.

IMPACT Putting *firstly, secondly* etc at the beginning of the sentence also visually helps the reader to differentiate between the various steps and thus also helps to clarify the succession of steps. This means that it will be easier for readers to replicate your method.

19 Methods: Put the steps in chronological order. Put dates at the beginning.

NO!	YES!
1) *After* plant acclimatization in the greenhouse, 130 healthy plants for each treatment and line were transplanted in an open field. *Before that,* however, bio-morphological characteristics on 10 representative samples were identified for each chemo-type.	Bio-morphological characteristics from 10 representative samples were identified for each chemotype. After plant acclimatization in the greenhouse, 130 healthy plants for each treatment and line were transplanted in an open field.
2) Second, 10 face-to-face in-depth interviews were conducted with the general directors and top managers of each DG, *between January 2016 and April 2017.*	Second, *between January 2026 and April 2027* ten face-to-face in-depth interviews were conducted with the general directors and top managers of each DG.
3) The bearing capacity was measured as Dynamic Module (Evd), on each pit using a falling weight deflectometer, after causing soil compaction by runs of a Range Rover jeep (1000 Kg), *twice a year*, over the ground of each side of the holes.	*Twice a year*, the soil was compacted by running a Range Rover (1000 kg) over the ground beside the holes. The bearing capacity was measured as a dynamic module (Evd), on each pit using a falling weight deflectometer.
4) The growth form and vigor of trees, expressed as the main length of the shoots of each plant, was monitored, avoiding destructive methods, *in July of every year, until the end of the experiment*	*In July each year until the end of the experiment*, the growth form and vigor of trees, expressed as the main length of the shoots of each plant, were monitored without the use of destructive methods.
5) On 15 September 2025 and 31 October 2026, in the first and second year, the seeds were sown at a rate of 100 kg ha^{-1}	The seeds were sown at a rate of 100 kg ha^{-1}, on 15 September 2025 and 31 October 2026, in the first and second year, respectively.

MISTAKE

Example 1: In order to be able to replicate your methodology, it helps to show readers the steps you took in chronological order. The NO example is confusing as the steps are inverted.

Examples 2–4: Putting the date something was done at the end of a sentence goes against the typical expectations of readers who are used to seeing the date first.

Example 5: In this case, unlike Examples 2–4, the *rate* is more important than the date and should thus be given priority in the order of the sentence.

20 Results: Ensure the reader understands whether you are talking about your results or what has already been established by others. Generally speaking, use the past tense to report your results. 💣

NO!	YES!
1) RESULTS: As a result of an extensive search for AP2-domain containing proteins, 149 distinct AP2/ERF putative TFs *have been* identified**.**	RESULTS: *We conducted* an extensive search for AP2-domain containing proteins, and *identified* 149 distinct AP2/ERF putative TFs**.**
2) The group contained 20 separate genes, which *could be identified* due to the ...	The group contained 20 separate genes, which *we were able to identify* due to ...
3) The microscopy results *confirm* that the surface *is* composed of a copper substrate coated with a layer of hard chromium. In fact, copper *is* commonly used for substrates. The coating *has* many micro cracks. Samples B1, C1, D1 *do not present* any microstructural differences between core and surface.	Our microscopy results *confirmed* that the surface *was* composed of a copper substrate coated with a layer of hard chromium. In fact, copper *is* commonly used for substrates. The coating *had* many micro cracks. Samples B1, C1, D1 *did not present* any microstructural differences between core and surface.

MISTAKE Inconsistent use of the present simple (e.g. *shows, is shown*), past simple (*showed, was shown*) and present perfect (*has shown, has been shown*) can cause confusion for the reader. Note: Examples 1–3 are all in sequence from the same paper.

Example 1: This is the first sentence in the first paragraph of the Results section. The first phrase (*As a result of an extensive search for AP2-domain containing proteins*) does not tell the reader who carried out the extensive search and thus the reader cannot be sure who did the identifying. In fact, it seems that they were identified by someone else because the author has used the present perfect (*have been*) rather than the simple past (*were*). This problem is also due to the choice of using the passive, in which the subject of the verb is not explicitly indicated. You may have been told by your physics or math professor that the passive feel is more 'elegant' and 'objective' (in reality the passive is no more elegant or objective than the active).

Your job in the first sentence of every paragraph is to establish clearly whether you are talking about something that you found or that others have found. So I strongly suggest you use *we*. Then in the next sentence, now that you have established that you are talking about your results, you can use the passive. You may argue that in a section entitled 'Results' you are clearly going to discuss your results, so the reader does not need any clarification. In reality this is not always the case, as you may also compare your results with those of others.

Example 2: *could* is misused here. When you are talking about something that was really achieved, then use *be able to* (with *we* as the subject), *could* means hypothetically.

Example 3: This entire NO paragraph is in the simple present, which tends to be used to indicate already established knowledge. In reality, the only one that should be in the present is *In fact, copper is commonly used for substrates* given that this is not something that the authors found, but something that is already known. The fact that the author has used the present tense also for all the other verbs could be confusing for readers as they may think the author is not describing his/her own results but simply reporting information that is already known.

SOLUTION If the verb refers to something you discovered in your tests, then use the simple past. If instead you are talking about something that is always true (*copper is a metal*) use the simple present. If you are talking about something that has already been verified by others and is part of the literature, you can use both tenses, but it must be clear that you are talking about the literature and not about your results.

IMPACT Two or more of the following people are likely to read your Results section, and all of them need to understand whether you are talking about your results or those of another research group. i) Your co-authors - they need to check that what you have written is scientifically accurate; ii) An English editing agency - for them it is essential to understand otherwise they cannot make the relevant changes to the tenses; iii) the editor and reviewers - if they can't differentiate between your results and those of other, then they cannot appreciate the scientific quality of your work and the gap you have filled. So do not underestimate the a) importance of choosing the right tense, b) the potential dangers of only using the passive form.

21 Results: Do not write long descriptions of your results if these could easily be put in a table. And do not repeat information that is clearly shown in a table, instead interpret it. 💣

NO!	YES!

NO!

Variables	Range	Base		Premium	
		Frequency	Percentage	Frequency	Percentage
Frequency of wine consumption	1-2 times a week	35	34.31	39	37.14
	3-5 times a week	27	26.47	28	26.67
	less than once a week	16	15.69	15	14.29
	everyday	24	23.53	23	21.90
Favorite wine typology	white	40	39.22	46	43.81
	sparkling	1	0.98	8	7.62
	rose	5	4.90	3	2.86
	red	55	53.92	44	41.9

Table 3 highlights that more of the interviewees prefer red wine to white wine, 55 and 40 respondents respectively, while sparkling wine was preferred by only one respondent. More than 60% of the total sample stated that they drink wine at least once a week up to four times a week, while only 15% drink wine less than once a week.

YES!

Variables	Range	Base		Premium	
		Frequency	Percentage	Frequency	Percentage
Frequency of wine consumption	1-2 times a week	35	34.31	39	37.14
	3-5 times a week	27	26.47	28	26.67
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	everyday	24	23.53	23	21.90
Favorite wine typology	white	40	39.22	46	43.81
	sparkling	1	0.98	8	7.62
	rose	5	4.90	3	2.86
	red	55	53.92	44	41.9

Table 3 highlights that there was slight preference for red wine over white wine, and that the sample was essentially made up of regular wine drinkers. These two factors clearly indicate that ... In addition, the fact that only one respondent preferred sparkling wine means that ...

MISTAKE From a reader's point of view the Results section can be extremely tedious if the author:

- details every single results and/or fails to use a table.
- uses a table but then repeats all the information in the main text that the reader has already assimilated via the table.

SOLUTION If you can put your results in a table, then use a table. Treat the table and the text as two distinct elements: the table provides the information, the text interprets it.

IMPACT If you bore your reader in the Results section, there is a good chance that they won't read the Discussion (which is where you interpret your results and compare them with what others have found) - which in most papers is the most important section.

Do not underestimate the importance of tables. They may be the only the parts of the paper that the reader looks at.

22 Tables: Use the simple present to describe what the table does, and the past to discuss what the table shows.

NO!	YES!
Table 3 <u>highlights</u> that there *is* no significant statistical difference in δ and ρ between the three groups, suggesting that the price *does* not affect the time preference.	Table 3 <u>highlights</u> that there *was* no significant statistical difference in δ and ρ between the three groups, suggesting that the price *did not* affect the time preference.

MISTAKE The use of the present tense (*highlights*) in the above example is correct. Typically we use the present tense to describe what a table or figure *demonstrates / reveals / shows / highlights / indicates* etc. However, saying that *the price <u>does not affect</u> the time preference* will be interpreted by the reader that this affirmation is a general truth. This is because in scientific works the present tense is often used to describe what others have found and thus what has generally been accepted. Instead a table that refers to <u>your</u> findings only contains information that is true for <u>your</u> experiments and may thus not necessarily be generalized to all cases.

SOLUTION When discussing the statistics (i.e. <u>your</u> findings) in a table that refers to <u>your</u> work, you should use the simple past. The phrase *suggesting that the price does not affect the time preference* could in reality be in either tense. The present tense tells the reader that you are generalizing your result to other possible similar cases. The past tense suggests that you are more cautious and are specifically referring to what happened in your experiments but which may not necessarily be extendible to other/all similar experiments.

IMPACT You might give the impression of being a little arrogant or imprudent if you use the present tense when interpreting your findings. In fact, the present tense gives the reader a sense of a universal truth, whereas the reviewer may be able to prove to you that your results <u>cannot</u> be generalized. You are thus protecting yourself from adverse comments but opting for the more cautious use of the past than the certainty implied by the present.

23 Tables: In captions, and when referring to figures and tables, use the least words possible.

NO!	YES!
Figure 1: *Bar plot representing* total weed density as ..	Figure 1: Total weed density as …
Figure 2: *A graphical representation* of the time course …	Figure 2: The time course of …
We show an example of this effect in Fig. 4, where the An example of this effect *is shown* in Fig. 4, where the	Figure 4 *shows* an example where the
As shown *in the scheme reported* in Figure 7 …	As shown in Figure 7 …
As showed in the table 2, age was …	Table 2 highlights that age was …
The mass spectrum, *shown in Figure 14*, proved that ion fragments …	The mass spectrum (Figure 14) proved that ion fragments …
The clinical outcome, at discharge from neurorehabilitation unit, *is represented in Figure 1. As the figure shows*, …	Figure 1 shows the clinical outcome, at discharge from neurorehabilitation unit, and highlights that

MISTAKE The NO examples are <u>not</u> mistakes in terms of form, but they use an unnecessary number of words. Also, you don't need to say that a figure or table is, for example, *a bar plot*, because the reader can easily see this for him/herself.

SOLUTION Begin the sentence with *Figure 3 / Table 5 shows / reports / highlights / reveals* etc. Remember that if the first word of your sentence is *Table 1, Figure 7* etc, the words *table* and *figure* need to be written in full. When associated with a number, *table, figure* etc require an initial capital letter (*Table 2, Figure 3*).

IMPACT i) Readers will not have to read unnecessary words. ii) You are less likely to make mistakes in your English. For example, *As showed in the table 2* contains three mistakes (*showed* instead of *shown*, *the table* instead of *Table*, lower case t (*table*) instead of upper case T (*Table*). By writing *Table 2* you avoid all three mistakes!

24 Tables: Avoid redundancy by avoiding repetitions.

NO!	YES!
0 = if the firm has not invested in Industry 4.0; 1 = *if the firm* is planning to invest in Industry 4.0; 2 = *if the firm* has invested in Industry 4.0	0 = *the firm* has not invested in Industry 4.0; 1 = planning to invest; 2 = already invested

MISTAKE In the table where the NO example comes from there were 14 cells containing the phrase *if the firm*. This has two results: i) very tedious for the reader, ii) the table has to be bigger for all the words to fit.

SOLUTION In YES example, *the firm* and *Industry 4.0* are only used in the first explanation. This is enough for the reader to understand that this applies to all the subsequent explanations. So, when you have created your table, try to delete as much repeated info as possible.

IMPACT There is no point in creating a table if readers are not going to read it. You will discourage them from reading if their eye falls on a lot of repeated words contained in a huge table.

Chapter 4
Research Papers: Discussion, Conclusions, Review Papers

THE DISCUSSION

The Discussion is generally the hardest part of the paper to write. It is often subject to the most mistakes by the author. Most of these mistakes relate to i) not highlighting your key findings, ii) not differentiating your work from others, iii) writing long paragraphs, iv) not mentioning your limitations.

These points are mentioned in sections 31–56 of this book.

25 Limitations: Don't finish your paper by talking about your limitations. Consider relocating the limitations to earlier in the Conclusions, or to the Discussion.

NO!	YES!
..... as future research suggests, it is necessary to reach an agreed conceptualization of proximity. This work represents the first step towards this goal: we need fewer dimensions, but they should be heterogeneous. This work presents some limitations. Our results may have been negatively influenced by .... The description of the bibliometric findings is also the result of the subjective understanding of authors, and thus liable to bounded rationality. Moreover, we did not consider ... Furthermore, we have not included ...	This work presents some limitations. Our results may have been negatively influenced by .... The description of the bibliometric findings is also the result of the subjective understanding of authors, and thus liable to bounded rationality. Moreover, we did not consider ... Furthermore, we have not included ... This work represents the first step towards this goal: we need fewer dimensions, but they should be heterogeneous.

MISTAKE The NO example comes from the Conclusions section. The example contains two parts: i) something about future work, ii) limitations. In your paper you must mention any limitations of your research. Where you mention these limitations is key to the final impression your paper will have on the reader. Ending your Conclusions with your limitations, means the last thing readers will read is the negative side to your work rather than the positive findings.

SOLUTION Consider mentioning your limitations either at the end of the Discussion, or at an early point in the Conclusions. However, you should see where other authors of your chosen journal have located their limitations - your journal may have a standard position.

IMPACT You want your readers to finish your paper focusing on the important nature of your findings. This should be the last thing that they read - you want to leave them feeling positive about your work! If you focus on the negative, this could also have a negative effect on the readers' (and particularly the reviewers') overall impression and judgment, and it may be what they remember the most about your paper.

26 Limitations: Don't just list your limitations, justify them. 💣※

NO!	YES!
Our approach has some *weaknesses* in terms of a, b and c .... A lack of data on the micro elements of environmental quality, *reduced the possibility* to ...	*Although* we opted not to investigate a, b and c .... *we believe that ... In fact*, such a lack of data *is common* in this particular field because ...
Another problem was that the lack of data on the quality of forestry at a municipality level meant that ... *Moreover*, the HNV farmland indicator is quantified without including forestry farmers. ... *Another limitation* concerns ... thus a pure indicator could not be developed ...	Similarly the lack of data on the quality of forestry at a municipality level *was due to* municipal records not being kept on the number of trees planted. Despite this ... The HNV farmland indicator was quantified without including forestry farmers. However, *the literature is full of similar data* where the farmers themselves were not involved, again because no records were kept.
The econometrics model was created using a static model, and adding a past HNV indicator as an explanatory variable. However, future work will involve a dynamic analysis ...	The econometrics model was created using a static model, and adding a past HNV indicator as an explanatory variable. *A static model does however have several advantages: x, y and z. In any case,* future work will involve a dynamic analysis ...

MISTAKE Don't simply list a series of limitations. Don't underline the negativity of your research by using words such as *moreover* (*moreover* is often used when you have said one negative thing and are about to say another negative thing), *another limitation / problem / issue*, etc

SOLUTION i) Try to present your limitations in a positive light. ii) Always justify your limitations, i.e. don't just tell readers that you didn't do something, also tell them <u>why</u> you didn't do something (*the sample was small <u>because</u> ... other authors have encountered the same problem and so ...*).

IMPACT If you approach your limitations in a positive (but honest and transparent) way, then readers will not be left thinking that your research has been undermined by so many negative factors.

27 Conclusions: Don't write your Conclusions in a hurry.

NO!	YES!
In addition to the positive features of this study, there are also various limitations that should be mentioned, as they could be closely connected with avenues for future research. This study focuses on firms located in a particular geographical area (northern Spain), and the results cannot be extended to the whole population of companies worldwide. Another limitation concerns the age of sample consumers generally young people. Despite the limitation, the research can suggest changing in different stakeholders strategies. Indeed many other studies can emerge mainly at European level.	This study has focused on firms located in a particular geographical area (northern Spain), thus the results cannot be extended to the rest of Europe. We also only investigated young entrepreneurs (under 40). However, we believe these two aspects could be the basis of future research i.e. investigating stakeholder strategies in other EU countries as well as an older segment (40+) of entrepreneurs.

MISTAKE Typically you write your Conclusions in a hurry because you have a journal deadline to meet, or are simply anxious to get the paper finished and get back to the laboratory! The result is that the final impression of your readers (and your reviewers) will not be positive. The NO example is the last paragraph of the Conclusions. The sentences are full of redundancy and contain mistakes in the English, and have clearly not been re-read.

SOLUTION Provide your readers with a positive impression of your work i) by writing concisely (which in turn will probably reduce the number of mistakes you make in English), ii) by checking carefully what you have written and trying to write as precisely as possible - note how *avenues of future research* (NO version) has been turned into two precise 'avenues' in the YES version.

IMPACT The Conclusions may be the last thing your reviewers read. If they find that the Conclusions add no value, they are less likely to accept your paper for publication. Your aim is to have your paper published quickly and with the minimum number of revisions requested by the editor.

28 Conclusions: End with something memorable and comprehensible.

NO!	YES!
Finally, the utility of some of Smith's specific concepts in practice has already been explored in a plethora of economic, political and sociopolitical contributions (Figueira & Roy, 2018; Simos, 2019; Jones et al., 2020; Schmidt, 2021). Within the scope of this article, it is sufficient for readers to remember that the call to Smith's works, as well as of other authors who have thoroughly studied the sociological underpinnings of human action and thought, is healthy and necessary because, as Smith emphasized on several occasions both in his early and later work (Smith 2020, 2023) but most notably - and indeed poetically - in his groundbreaking treatise published in 1999: "society is essentially made up of greedy self-centered people who impose themselves on needy outward-centered people" (Smith 1999).	Smith's work is key to our understanding of XYZ because ...

MISTAKE The NO! example is the final two sentences of the Conclusions. These two sentences are unmemorable because i) they contain a lot of references (this is fine in the Introduction, but not here) ii) the last sentence is very long and complex.

SOLUTION Imagine that you are the reader. What do want from the Conclusions section? What information would be useful for you? Do you want to receive this information in a long difficult-to-read/absorb sentence or in a sentence that you can understand immediately?

IMPACT In the Conclusions and of course in all the paper, don't focus on creating your own elegant style of writing, instead focus on the reader's ability to comprehend what you have written. If you are reader-focused, readers will appreciate you, remember you, and cite you.

29 Conclusions: Highlight the importance of your work by putting key findings at the beginning of the sentence, not at the end. Be as detailed as possible.

NO!	YES!
Conclusions: An effective strategy to monitor the concentration of urea concentration during dialysis can be achieved with *our biosensor*.	Conclusions: *Our biosensor* provides an effective strategy for monitoring the concentration of urea during dialysis. Conclusions: Our biosensor *is 18% more reliable than other sensors* in monitoring the concentration of urea during dialysis.

MISTAKE AND SOLUTION Readers tend to read the Conclusions very quickly. They want to draw out the main points as fast as possible. Given that the readers' eyes tend to focus on the beginning of the sentence, it makes sense to put your key words there.

IMPACT A reader who is skimming your Conclusions (i.e. not reading every word, but reading vertically not horizontally) is more likely to notice your key findings if they are at the beginning of the sentence. The result will also be that your writing is more dynamic and concise, thus giving reviewers a stronger sense of the importance of your work.

30 Review papers: Think about what readers really want to learn, and present this info in an-easy-to-navigate way. 💣

MISTAKE The biggest mistake you can make when writing a review paper is not understanding the real reasons for writing it. It should be a succinct and coherent analysis of recent progress in a specific area of research. A review paper is NOT an obligation set for you by a dastardly professor as a means of getting something published. Nor is it merely a summary of your research field through a list of papers divided thematically into sections.

It is not enough just to say what has been done, though learning what has been done is clearly useful for i) students who need an introduction to the topic and want to find the key works in the field; ii) researchers who want to know the state-of-the-art and the direction that their field is moving in.

SOLUTION Possibly even more than when writing a normal research paper, you need to think of the clearest possible structure.

The Abstract needs to explain why you carried out the review. Your reason cannot simply be to describe the state of the art. The main reason should be to facilitate other researchers in making the next step in the field, and also to help them see what next steps possibly need to be taken.

The Introduction should outline as clearly as possible, even including a figure, how your review paper is organized. Review papers tend to be by nature very long, thus it is key for readers to be able to navigate your document. This means that you not only need to divide your paper up into thematic sections, but within those sections there need to be clear subheadings that enable a reader to quickly locate or relocate what they are looking for.

The Introduction, or another section (similar to a Methods section), may also contain an explanation as to how you accessed the various sources / articles and what selection criteria you used.

Each of the other sections of your review then needs to cover the four points below:

1. what problem the studies were trying to solve and why this problem needed solving

2. how it was solved or hasn't been solved yet

3. how this solution compares with other solutions, including how it might be better (or worse)

4. what the next step might be (i.e. future research directions)

Most review papers tend to focus on points 1 and 2, and occasionally point 3. What they fail to do is to mention point 4. In fact point 4, which could be argued as being the most important point of all, is simply relegated to the Conclusions (often entitled *Concluding Remarks and Future Perspectives*). This means that readers have to trawl through all the sections individually without really knowing what the implications are of the research that has been described.

In my opinion as someone who has edited hundreds of review papers, you need to integrate Point 4 within each section. Preferably not just as a concluding paragraph of the section, but within Point 3. This is because you cannot be sure how people will read the review - they are unlikely to read all of it in sequence, and may not even read the Conclusions. Thus by covering the four points mentioned above, you provide a full picture of each individual piece of research or groups of similar research.

IMPACT Knowing that review papers are actually really important will help you to motivate yourself into drafting a good review. Here are four (of many) reasons why review papers are important.

1. For those in the medical field, review papers provide researchers and physicians with alternative approaches to dealing with everyday but possibly life-threatening situations.

2. In other fields, a review paper may highlight weaknesses in the current state of the art that can only come to light if all the related work is analysed together in one review paper rather than individual paper by individual paper.

3. Various disciplines may be addressed within the same review paper. This might give researchers in a particular field suggestions on people outside their very specific research area who might in reality have very similar aims. You could thus be helping to set up new collaborations.

4. Review papers typically end with suggestions for future research. This can be really useful for other researchers who may not have thought of such avenues before.

Your job when writing a review is to bear these reasons in mind and help your readers gain a wider understanding of the research area, its limitations, and the directions that it could go in.

Chapter 5
Readability and Avoiding Redundancy

31 Readability: Just because your paper or chapter is published doesn't mean that anyone will actually read it. 💣

NO!
This would seem to suggest that in countries where racial divisions are still an issue, having achieved a university degree might foster nascent entrepreneurs. *This sheds light on an fascinating future debate in the policy arena*, given that positive discrimination may be not only an issue pertaining to equal opportunities but could promote human resource manager awareness *to cover relevant positions*, *thanks to spontaneous and pre-established mechanisms led by top-down approaches that* rebuild *backward linkages* and go beyond the conception of "*racial equality*" as a slogan.

MISTAKE Authors frequently resort to jargon and vague phrases (see *italics* in the example). This is because i) they believe it makes them sound more credible, ii) it is easy to resort to vague language when your own ideas about your subject are not very clear. Albert Einstein is reputed to have said: *If you can't explain it simply, you don't understand it well enough.* The problem is that if readers encounter apparently meaningless phrases in the Abstract and then find the same jargon-riddled style in the opening paragraph of the Introduction, it may put them off reading the whole paper or mean that they don't understand what they have read.

SOLUTION There is no YES! because I never found out what the author was actually trying to say.

In any case, always try to write in the simplest way possible. Einstein also said: *It should be possible to explain the laws of physics to a barista.* Note: Einstein actually wrote 'barmaid' but he was writing a long time ago when sexist language was the norm. Such language / terminology today would not be acceptable.

IMPACT The NO! example was in fact published. However - and this is REALLY important - the fact of being published is not sufficient. Even if your paper, chapter, book is published, if readers cannot understand it, they will (hopefully!) not cite it in their own papers. If your work is not cited, then it will remain anonymous. Thus it is essential to write in a way that not only satisfies reviewers and editors, but above all the readers.

32 Readability: Confused or vague writing tends to lead to a confused reader. Write clearly and logically.

NO!	YES!
In particular, the East Asian countries should be divided along two groups, the Confucianism countries and the non-Confucianism ones – i.e. China, Korea, etc. in the first group, and India, Pakistan, etc. in the second group.	East Asian countries tend to be divided into two groups, Confucianism countries (e.g. China, Korea) and non-Confucianism countries (e.g. India, Pakistan).
For the experimental field study, data gathering has been undertaken in BRICS (i.e. Brazil, Russia, India, China and South Africa). These countries face such similar tensions and patterns of development as the increasing levels of industrialization as well of population, and the rapid change in lifestyles (Cowan et al., 2014). Despite such similarities, they present different national cultural environments. In particular, BRICS can be divided into individualistic countries – namely Russia and India – and collectivistic countries – namely Brazil, China, and South Africa.	Data were gathered for Brazil, Russia, India, China and South Africa (BRICS). These countries face similar tensions and patterns of development such as increasing levels of industrialization and populations, and rapid changes in lifestyle (Cowan et al., 2014). Despite such similarities, they have different cultural environments. Russia and India are more individualistic, whereas Brazil, China, and South Africa are more collectivistic.

MISTAKE The NO examples are the result of the author not re-reading the paper before submitting it to publication.

SOLUTION Write a first draft of your paper without thinking too much about language issues, but just focusing on content. Then re-write the paper (bearing in mind all the guidelines in this book!) by trying to think from the reader's point of view. This means presenting information in the clearest and most logical way possible.

IMPACT Re-writing your paper following the advice above has majorly important impacts: i) your co-authors will be able to understand it better and thus be able to make more relevant changes; ii) the language agency that edits and proofreads your work will have to intervene less - if the agency editor has to make many major changes there is a good chance that he or she will miss the smaller errors; iii) the reviewers will be able to appreciate the content of your paper and not be distracted by the language, this will influence them in recommending your paper for publication; iv) readers are more likely to remember your findings and appreciate their significance.

33 Readability: The first words of a paragraph or sentence should immediately tell the reader what the subject is.

NO!	YES!
Founded in Manchester in 2023, the UP Center is a reference point for families and social, health and educational operators for all the problems concerning Down syndrome.	*The UP Center* was founded in Manchester in 2023. The association is a point of reference for families and social, health and educational operators for issues regarding Down's syndrome.
Being aware of the extraordinary role of enzymes in addressing the transformation of molecules, enzymologists, recurrently wonder on the real relevance of chemical reactivity of the molecules which take part in a metabolic pathway and, as corollary, on which features have been relevant, for allowing a molecule to become a metabolite.	*Enzymes play a key role* in the transformation of molecules. Enzymologists are thus interested in the significance of the chemical reactivity of the molecules in the metabolic pathway and, thus in which features enable a molecule to become a metabolite. *The extraordinary role of enzymes* in the transformation of molecules has been observed by enzymologists, ... *Due to the extraordinary role of enzymes* in the transformation of molecules, enzymologists ...

MISTAKE Sentences are often made up of two parts i) a main clause with the key subject ii) a subsidiary clause which gives more information about the key subject. Don't put the subsidiary clause before the main clause.

IMPACT Readers are often very busy and don't won't to waste time deciphering your paper. They want key information immediately. They don't want to have hold non-key information in their memory before they reach the key information. Also, the reader's eye tends to focus most on the left hand side of a page (unless of course the reader reads from right to left). Search engines too tend to scan the left. It thus makes sense not to put subsidiary information on the left as there is a chance that the reader might skip the words on the right.

Your paper can thus be read and understood more quickly and the key information will stand out. Your readers will come away with a positive impression, as they will not have had to work too hard to understand your paper.

34 Readability: Do not be vague - use specific rather than generic terms

NO!	YES!
1) The influence of the mass media on policy agenda is prominent for 'distant' events and issues, for example those regarding countries that suffer from poor political and economic conditions.	The mass media play a key role on the policy agenda of a country in terms of how they report events and issues that *take place a long way from that country*. This is particularly true for events in countries that suffer from poor political and economic conditions.
2) The research tests the relationship between *some characteristics* and the adoption of *a specific type* of diversification, using the Van der Ploeg and Roep's classification (2003), for defining the *different* diversification dimensions.	Using Van der Ploeg and Roep's classification this paper examines the relationship between entry into a new market segment and higher sales, and the adoption of conglomerate diversification.
3) Moreover, the results demonstrate that the activation of *each dimension of diversification* is influenced by *specific factors*.	The results demonstrate that business-level product diversification and corporate-level product diversification are both influenced by risk mitigation, protection from competing markets and the use of surplus cash flows, but only corporate-level product diversification is influenced by cost of entry.

MISTAKE

Example 1: If you begin any kind a text (paper, email, proposal etc) with a sentence that is difficult to interpret (what do *prominent* and *distant* mean?), there is a very strong chance that the reader will stop reading immediately (unless he/she is being paid to read it). In the NO! example, the meaning is almost inexplicable - putting something in inverted commas ('distant') does not in any way clarify the meaning.

Examples 2 and 3: tells the reader very little. It is full of vague phrases. The reader will not be stimulated to read the text.

SOLUTION Replace generic words with the most concrete words you can think of. The only way you can motivate that your readers to keep reading is to ensure that what you write is clear. At all times, imagine you are the reader - are you 100% sure that they will understand what you have written?

IMPACT By reading only concrete words, readers will feel they are getting value (i.e. useful new information) and will thus be motivated to continue reading. Readers are more likely to trust your method and results rather than questioning their value. Reviewers will have a clearer idea of the content and value of your paper and will thus do a better job in reviewing it. If they only see vague expressions they will be more inclined to reject the paper.

35 Readability: Avoid vague adjectives and adjectives that add no extra information.

NO!	YES!
Malaria is one of the most *important* and widespread tropical diseases.	Malaria is one of the most widespread tropical diseases.
This problem can be addressed by implementing *innovative* agronomic techniques that increase soil fertility whilst keeping weeds under control.	This problem can be addressed by implementing agronomic techniques that increase soil fertility whilst keeping weeds under control. Plants can be colonized *by up to 35%* by pathogenic bacteria.
An *interesting* difference in the expression level was observed for *ABC1-2*.	The expression level observed for *ABC1-2 was 20% higher than found in previous studies*.
In Australia, Africa, Asia and South Africa these human figures are *surprisingly* found only on rock art paintings. In France, on the other hand,	In Australia, Africa, Asia and South Africa these human figures are found only on rock art paintings. *This is surprising* because ... In France, on the other hand, ...
All patients with relapses underwent a further endovascular treatment if the clinical condition was *relevant*.	All patients with relapses underwent a further endovascular treatment if they *were experiencing above average pain levels*.
These plants are currently divided into *distinct* species, Ralstonia solanacearum, R. pseudosolanacearum and R. sygzygii.	These plants are currently divided into *three* species, Ralstonia solanacearum, R. pseudosolanacearum and R. sygzygii.

MISTAKE Precision is key to academic writing. Whenever you use an adjective, ensure that the reader will understand exactly what you mean by that adjective.

SOLUTION First decide if the adjective is really necessary. In the first example *important* is redundant because its meaning is covered by *widespread* and in any in what sense is it important? In the second example, *innovative* adds no additional information - you would never write the opposite of *innovative* (e.g. *old-fashioned, outdated, regressive*)! If you can't delete the adjective, then replace it with specific information as in the other examples.

IMPACT No readers like reading vague or redundant words. Such words slow down their comprehension of what you have written and may even encourage them to stop reading.

36 Readability: Ensure readers can understand whose research you arereferring to. ☀☀☀

NO!	YES!
1) As reported by Smith et al [2021], the scenario is further complicated by the absence of a standardized procedure for determining the rate. A similar problem was tackled by *the authors*, who proposed an inverse search procedure in order to establish the rate [Xi, 2018]. *Such a procedure* is a development of that followed in [Schmidt, 2020]. ... ... *In [Xi, 2018],* the rate was ... ... More recently, the same optimal notch geometry *was used* in *[Yu, 2022]* in order to ...	As reported by Smith et al [2021], the scenario is further complicated by the absence of a standardized procedure for determining the rate. *Our research group* tackled a similar problem (Xi, 2018) by using an inverse search procedure in order to ... ... *Our procedure* is a development of the one followed in [Jones, 2020]. ... ... In our previous work [Xi, 2018], the rate was ... ... More recently, *we used* the same optimal notch geometry in [Yu, 2018] in order to ...

Note: The problem outlined in this subsection is one of the most common and serious faults of scientific writing, and should be avoided at all costs.

MISTAKE In the NO example it is not completely clear who *the authors* are (Smith et al or the authors of the current paper?). In reality, the authors of the current paper are Xi and Yu, who are both part of the same research group. But by writing *In [Xi, 2018], the rate was ... ... More recently, the same optimal notch geometry was used in [Yu, 2022] in order to ...* it seems like Xi and Yu are not the authors of the current paper but belong to another research group. This is very dangerous because for the reader it seems that the authors are providing support for their current work by citing previous work done by another research group.

SOLUTION Tell your reader clearly when you did / found something. Use *we* and *our* (or *Smith's, Schmidt's* etc) rather than passive forms and impersonal expressions such as *the authors*. Your journal may specify that personal forms should not be used, but this recommendation has no logical basis and does not confer 'objectivity' to your research but actually makes it ambiguous and misleading. Instead my recommendation to use personal forms is grounded on being clear and truthful to the readers.

IMPACT Reviewers and readers cannot judge the importance of your work if they do not clearly understand what exactly you did and what others have done.

37 Readability: Avoid a colloquial style and idiomatic expressions.

NO!	YES!
We propose, therefore, to *look at the other side of the coin*: ...	We thus propose a *different viewpoint / an alternative approach*.
Just to mention a few examples from the last two decades ...	*There have been* a number of examples of studies over the last two decades ...
In brief, *we have studied so much (and still not enough)* about women's role in the workplace, especially with regard to the glass ceiling. *But what about figuring out the motivation of Arabic women not achieving managerial positions?*	Although *considerable initial research* has been done on women's role in the workplace, especially with regard to the glass ceiling, *the reasons for Arabic women not achieving managerial positions remain relatively unexplored.*
Most studies focus on female politicians in general *but it seems an interesting question* for what reasons so many women join left-wing rather than right-wing parties.	Most studies focus on female politicians in general, *ignoring* the reasons why so many women join left-wing rather than right-wing parties.
It was assumed that football fans identify with and consequently *keep their fingers crossed* for football teams of their own nationality.	It was assumed that viewers would generally tend to identify with and *root* for teams from their own country.
It is eye-catching that the importance of each motive was different in every year of data collection.	The importance of each motive was different in each year of the data collection.

MISTAKE The problems with colloquial or idiomatic expressions are: i) they don't match the academic style of a research article and thus may distract the reader, ii) because they are non academic there is a chance your reader may not know what they mean (because the reader's language does not contain an equivalent expression); iii) you may mistranslate from your own language and thus make a mistake in your English.

SOLUTION Confine yourself to using standard academic English expressions. Your aim is not to demonstrate your massive knowledge of the language, but only to communicate your research findings.

IMPACT You want all your readers to i) understand you, ii) to take you seriously - if they don't, you risk losing your credibility.

38 Readability: Do not use synonyms to avoid repeating a key word. 💣

NO!	YES!
1) In this paper the level of environmental management scheme (EMS) implementation in 386 European *companies* was assessed. The actions taken by the surveyed *enterprises* to comply with the EU regulations was analyzed. Our study that a *firm's* operations lead to isomorphic behavior.	In this paper the level of environmental management scheme (EMS) implementation in 386 European *companies* was assessed. The actions taken by the surveyed *companies* to comply with the EU regulations was analyzed. Our study suggests that a *company's* operations lead to isomorphic behavior.
2) The results of the Consensus Working Group led to the publication of PSH-AM, and enabled this bias to be overcome. In this study we employed *this clinical tool* demonstrating that PSH signs might ...	The results of the Consensus Working Group led to the publication of PSH-AM, and enabled this bias to be overcome. In this study, we *employed PSH-AM* and revealed that PSH signs might ...
3) Several new bioengineering non-invasive solutions have been implemented to collect physiological signals. One of the most promising is *"smart textiles",* which combine ... *Such material* has also been proposed as a valuable resource for monitoring ...	Several new bioengineering non-invasive solutions have been implemented to collect physiological signals. One of the most promising is *"smart textiles",* which combine ... Smart textiles *are* also a valuable resource for monitoring ...
4) These aspects are key to obtaining a *rapid* recombination and *quick* fitness evaluation, which boost the evolution.	These aspects are key to obtaining a *rapid* recombination and a *rapid* fitness evaluation, which boost the evolution.

MISTAKE

Example 1: The reader might think that the author wants to make a distinction between *company*, *enterprise* and *firm*. In reality, the author was simply trying not to repeat the same word.

Example 2: Two assumptions are made here: i) that the reader is reading attentively and has read and understood the previous sentence (*The results ... overcome*); and ii) that the reader will understand what *this clinical tool* refers to.

Example 3: This extract shows two successive paragraphs from an Introduction (in the original, the first paragraph was considerably longer than the one shown here). The problem is that when the reader starts reading the second paragraph he/she may have no idea that *such material* refers back to *smart textiles*. This will be

compounded by the fact that *material* is singular whereas *textiles* is plural, so there could also be confusion due to this grammatical lack of concordance.

Example 4: Repetition doesn't always involve key words. The key aim of repeating the same word is to ensure that there is no confusion for the reader regarding what a word means. In the example, the author uses *rapid* and *quick* to mean the same thing. But the reader cannot be 100% sure that *rapid* and *quick* represent the same level of speed.

Note: A key word doesn't have to be a noun. It can also be a verb: if you are talking about *disassembling* a product in order to replace any worn parts, then only use the verb *disassemble*. If you also use *dismantle* and *dismount*, then the reader cannot be sure that you are using these two terms in exactly the same way that you have used *disassemble*. Your readers may think that there is a subtle difference in meaning between these verbs.

SOLUTION The idea that we should not repeat the same word comes from our school-days when our teacher's aim was to expand our vocabulary by getting us to think of synonyms. However, when writing an academic paper, your aim is for the reader to understand your meaning immediately. Your aim is not to impress your reader with your wide knowledge of English synonyms! So, always use the same key word. If you do not like this solution, then in Example 1, for instance, you can tell the reader in advance that you will be using the terms *company*, *enterprise* and *firm* indifferently with no change in meaning. Note: synonyms <u>should</u> be used for non-key (typically verbs, adjectives and generic nouns).

IMPACT Your aim is not to force your reader to decide what certain phrases mean, but instead to make those phrases so clear that reading your paper is effortless. Readers can thus focus on absorbing the key information rather than deciphering what you mean.

39 Readability: Don't use a pronoun before the noun it refers to has been mentioned, or when there is more than one noun that the pronoun could refer to.

NO!	YES!
1) Smith et al (2020) maintain that, since public contributions cover *their* budget, it is often the case that public museums have scarce incentives to generate ...	Smith et al (2020)) maintain that, since public contributions cover *a public museum's budget, such museums* have few incentives to generate ...
2) Although *it* is a very stable and chemically inert material, focused studies have verified that the composition of *beeswax* found in ...	Although *beeswax* is a very stable and chemically inert material, studies have verified that the composition of beeswax found in ...
3) Lactoferrin is a minor component (0.097–0.133 g L^{-1}) of donkey milk compared to human milk, *in which* it ranges from 2. to 5 g L^{-1}.	Lactoferrin is a minor component (0.097–0.133 g L^{-1}) of donkey milk compared to human milk. In fact, *in human milk* it ranges from 2. to 5 g L^{-1}.
4) The substrates used were 1) soil alone; 2) crushed bricks measuring 0-30 mm; 3) crushed bricks measuring 6–30 mm, *each of these* mixed with compost from municipal waste (15% v/v).	The substrates used were 1) soil alone; 2) crushed bricks measuring 0–30 mm; 3) crushed bricks measuring 6–30 mm. *The substrates* were then mixed with compost from municipal waste (15% v/v).
5) *Halophytes* are now one of the most interesting group of plants, in order to cultivation of marginal areas with seawater, or on saline areas near the sea, due to *their* high salt tolerance.	Due to *their* high salt tolerance, *halophytes* are a particularly interesting group of plants for cultivating marginal areas using seawater, or on saline areas near the sea. Given that *halophytes* have a high tolerance to salt, they are a ....

MISTAKE

Example 1: it is not immediately clear what or who *their* refers to. Even though it becomes apparent that *their* refers to public museums, the reader may still be confused and may initially think that *their* refers back to some other noun that was previously mentioned.

Example 2: we don't understand what *it* refers to until 17 words later.

Example 3: although it should be clear that *which* refers to human milk (given that the range is higher than that indicated for donkey milk), an inattentive reader may not be sure without re-reading the sentence to check.

Example 4: *these* could refer to the *bricks* (which is the last plural noun that the reader has read) or to *substrates*.

The first YES Example 5 is an exception - in this case the pronoun (*their*) and the noun (*halophyte*) are only three words apart. The reader will thus have no difficulty in making the pronoun/noun association. In any case, the issue can be resolved by re-writing the phrase as in the second YES Example 5.

SOLUTION Whenever you use a pronoun, decide whether it might be clearer to replace the pronoun with the noun that the pronoun refers to. It is not considered bad style in English to repeat words, if by doing so it makes the meaning clearer.

IMPACT You want readers to understand your text immediately. If you use pronouns such as *it, they, this, which* in sentences where there is more than one noun, then you are forcing the reader to read backwards (i.e. to re-read part of the sentence) in order to be sure what the pronoun refers to. Instead, by replacing the pronoun with the noun it refers to, your readers will understand immediately and can continue reading forwards. Essentially, you never want to force your readers to interrupt their flow of reading by having to read the same sentence twice before they understand the meaning. Ambiguity is one of principle readers why editors, reviewers and readers get confused when reading a paper. If you make a special effort to remove ambiguity (also by getting other people to check what you have written), then you will considerably increase the clarity of your paper and thus increase your chances of your paper being cited by others.

40 Readability: Ensure it is clear what 'this' refers to in phrases such as 'this study'.

NO!	YES!
1) Smith et al. (2018) explored the influence of institutional pressures from different stakeholders. *In this study* it was highlighted how institutional pressures generally strengthen the internalization of proactive environmental practices.	Smith et al. (2018) explored the influence of institutional pressures from different stakeholders. *Their study* highlighted how institutional pressures generally strengthen the internalization of proactive environmental practices.
2) The misleading result can be attributed to calculation errors (Wang et al., 2019). *This article* showed a that ... This may due to the fact that *in this study* the ...	The misleading result can be attributed to calculation errors (Wang et al., 2019). *Wang's article* showed that ... This may be due to the fact that in *Wang's study* the ...
3) In the veterinary literature only one *study (2019)* described hypersensitivity reactions in cats during and after HSA infusion. *In this study* 25% HSA was administered to ...	In the veterinary literature only one *study (Marcus, 2019)* has described hypersensitivity reactions in cats during and after HSA infusion. In fact *Marcus's study*, 25% HSA was administered to ...

MISTAKE Words such as *it, this, these, them* can be ambiguous when they are preceded by more than one noun. This means that the reader is left to decide which noun *this* (etc.) refers to, and may choose the wrong one.

SOLUTION You can often make your meaning clearer by replacing *this* (etc.) with a possessive pronoun e.g. *their, our* or by writing the other author's name (e.g. *Wang's*). In Example 3, adding the name of the author (*Marcus*) to the reference means that you can then use the genitive (*Marcus's*) to make it clear which study you are referring to.

IMPACT Particularly in the Abstract, Introduction and Discussion it is vital to understand whether you are talking about your findings / methods or those of another research group. If readers understand who carried out a particular activity your results are more likely to be registered and will then stand out, and readers will be less likely to misinterpret your research.

41 Readability: Avoid *the former* and *the latter.*

NO!	YES!
1) Weed control in maize can be both direct (e.g. mechanical tools or flaming) and indirect methods (Sartorius, 2022). Blah blah blah blah blah blah blah blah blah blah blah blah blah. *The latter* include any practices that prevent ...	Weed control in maize can be extremely challenging and relies on an integrated strategy through the application of both direct (e.g. mechanical tools or flaming) and *indirect methods* (Sartorius, 2022). Blah blah blah. *Indirect methods* include any practices that prevent ...
2) The weakening of the infested plants also results in a strong reduction in flowering and nectar production, consequently causing considerable production losses in unifloral eucalyptus honey (BUFFA, 2015). *The latter consideration assumes particular importance*, as eucalyptus honey represents ...	The weakening of the infested plants also results in a strong reduction in flowering and nectar production, consequently causing considerable production losses in unifloral eucalyptus honey (BUFFA, 2015). *Such losses are particularly worrying* given that eucalyptus honey represents ...
3) China and India have similar problems with population increase. *The former* has a population of around 1.5 billion. Blah blah blah blah blah blah blah blah blah blah blah blah blah. Blah blah blah blah blah blah blah blah blah blah blah blah blah. Blah blah blah blah blah blah blah blah blah blah in the northernmost part of the country. *The latter* has seen a 15% increase in population since 2019.	China and India have similar problems with population increase. *The former / China* has a population of around 1.5 billion. Blah blah blah blah blah blah blah blah blah blah blah blah. Blah blah blah blah blah blah blah blah blah blah. Blah blah blah blah blah blah blah blah blah blah blah blah in the northernmost part of the country. *India* has seen a 15% increase in population since 2019.

MISTAKE When using words such as *the latter*, you are assuming that the reader has actually read the previous sentence. Readers may simply be browsing the text, and if they see *the latter, it* etc, they won't know what these pronouns refer to. Even if they have been reading carefully, readers may still have to re-read the previous phrase to check what *the former* and *the latter* refer to. Example 3, *the former* is OK with reference to *China* as it is very close to its noun. But *the latter* is very far from the noun it refers to and it is also at the beginning of a new paragraph. The reader might think that *the latter* refers to *the northernmost part of the country* (i.e. of China) rather than *India*.

SOLUTION Repeat the noun/s that *former/latter* refer to. As mentioned in Section 38, there is no problem in repeating words.

IMPACT i) The reader is more likely to understand at first reading. ii) Using *the latter* often leads to vague writing (as in the third example); by repeating the key noun you are likely to be more concise. iii) When you have a co-author, he / she may change the order of the original elements (i.e. shift a sentence to a later point in the paragraph), but may forget to then change the sentence that begins *the latter*. This means that *the latter* is no longer associated with its original noun. Thus, avoiding *the former / latter* contributes to clearer / unambiguous writing when authors are writing together.

42 Readability: Do not use *the* when talking in general. Use *the* when talking about your specific cases.

NO!	YES!
Although previous research has shown that *the male* students tend to be less generous than *the female* students, *male* students in our experiments actually gave more to the homeless than *female* subjects. In the second test, *male* students were also more friendly to the homeless people they encountered than *female* students.	Although previous research has shown that <u>*male* students tend to be less generous than *female* students (Smith et al, 2020),</u> *the male* students in our experiments actually gave more to the homeless than *the female* subjects. In the second test, *the male* students were also more friendly to the homeless people they encountered than *the female* students.

MISTAKE Many languages do not have articles, so the result is that authors who speak such languages tend to use the articles in English quite randomly. In the NO example, the author has totally misused the definite article.

SOLUTION The rule is: i) if you are talking about something in general i.e. all male students or some male students then you must not use the definite article (e.g. the <u>underlined</u> part in the YES example; ii) if you are talking about examples that are specific to your work, then you must use the article (e.g. the part that is not underlined).

IMPACT Readers need to understand whether you are talking about something that is already known (in this case, no article required) or about what you found (article required). The correct use of the definite article (and in other cases, the correct use of tenses) will help readers to make this differentiation. You can thus remove any possible confusion with regard to your results.

43 Readability: Avoid unclear references to other papers and other parts of your paper.

NO!	YES!
1) The synthesis precursors of most flavonoids are malonyl-CoA and p-coumaroyl-CoA (Forkmann & Heller, 1999). These two compounds are coupled by enzyme chalcone synthase (CHS), *which is considered* to be the first enzyme involved in flavonoid biosynthesis.	The synthesis precursors of most flavonoids are malonyl-CoA and p-coumaroyl-CoA (Forkmann & Heller, 1999). These two compounds are coupled by enzyme chalcone synthase (CHS), which is considered to be the first enzyme involved in flavonoid biosynthesis *[Smith, 2020]*.
2) They were assayed using commercial kits, *as previously reported / as found elsewhere / as reported above / as mentioned earlier.*	They were assayed using commercial kits, *as reported in our previous work [34]. ..... as found in [67]. ..... as reported / mentioned in Sect 2.1.*
3) Results of the rebaudioside-A content in stevia plants are reported in Fig. 2. Its concentration in stevia dry leaves *has been discussed previously* with respect to the total glycosides.	Results of the rebaudioside-A content in stevia plants are reported in Fig. 2. *We discussed* its concentration in stevia dry *leaves in our previous paper [34]* with respect to the total glycosides.

MISTAKE

Example 1: There is no reference in the NO example, so we don't know if this is something general (*which is generally considered*) or something that the authors found (*we considered*). When using the passive, be clear who the agent is.

Example 2: All the phrases in italics in the NO example are unhelpful for the reader - *as previously reported* and *as found elsewhere (in what paper - this paper or in the literature?); as reported above* and *as mentioned* earlier (where exactly?).

Example 3: What does *previously* refer to - earlier in this paper? in a previous paper written by us? in someone else's paper? Again, the passive form is ambiguous.

SOLUTION Always put a reference: i.e. to specific section in your paper (if the reference is within your paper); ii) to an external paper.

IMPACT If you clearly indicate where information can be found, you will gain the trust of your readers who will thus have a more positive impression of your paper. This is particularly true when you are describing your methods (Example 2) - if a reader wants to replicate your method he/she needs to know where to look for the information to be able to carry out this replication.

44 Readability: When referring to your own geographical area and administrative units, don't assume your readers have the same level of knowledge as you do.

NO!	YES!
The invasive brown stink bug was recorded in the north of Sardinia, after a previous finding in the city of Cagliari.	The invasive brown stink bug was recorded in Sassari (*northern Sardinia, Italy*), after a previous finding *231 km away* in Cagliari (southern Sardinia).
Introduction: This study investigates the impact of recycling by citizens in 19 provinces and two autonomous regions in China covering the period 2001–2021. The types of recycling studied are:	Introduction: This study investigates the impact of recycling by citizens in 19 provinces and two autonomous regions in China covering the period 2001–2021. *This is a very large area given that the largest administrative unit in China is a province, and that China is divided up into 22 provinces and 5 autonomous regions. Essentially, the only areas of China that were not investigated were ...* The types of recycling studied are:

MISTAKE The first NO example is the first sentence of an Abstract. But where is Sardinia? And where is Cagliari in relation to the north of Sardinia? The author of this paper is Italian and comes from the island of Sardinia. She knows the geography of her island very well. The problem is that non-Italian readers will not have the same familiarity and thus cannot understand the importance of finding this stink bug in two places that are over 200 km apart. In the second NO example, the reader may have no idea that in China a *province* is the largest administrative unit (e.g. the province of Qinghai is around 200,000 square kilometers bigger than the whole of France!) or that Beijing and Shanghai are referred to as *municipalities*. In Italy a *municipality* is a subunit of a *province*, which in turn is a subunit of a *region* (the largest administrative area). Thus the same words may have totally different meanings from country to country.

SOLUTION Always imagine that your reader is from the other side of the globe. Give them precise details.

IMPACT By providing readers with clear details, they will be able to fully appreciate the importance and implications of your research.

45 Readability: With certain exceptions (*etc., e.g., i.e. in vivo, in vitro*), avoid Latin expressions.

NO!	YES!
This argument holds, *a fortiori,* in mergers, where the reduction of the number of firms in the market is an explicit objective.	This argument holds *for similar but even more convincing reasons* in mergers, ... // This is *even more true* in mergers ...
A priori cut-off value for response rate was set to 60% to be valid.	*A theoretical / hypothetical* cut-off value ... The *a priori* cut-off value ...

MISTAKE Some languages (e.g. Italian, French, Spanish) are based on Latin, and contain many Latin expressions and words. English too contains Latin expressions and words. However, Latin words are less likely to be understood by your readers than simple English words. The NO examples are correct in their use of Latin. However, *a fortiori* is not a common expression in any language. And in the second example the reader could be confused and think that *a priori* is a noun (where *a* is the indefinite article) or that there is a spelling mistake (i.e. the author really meant to write *a prior cut-off value*).

SOLUTION Use normal English. A possible exception to this is the use of *i.e.* and *e.g.,* as these are incredibly common abbreviations derived from Latin.

Note. i.e. is used in definitions (*Only three countries controlled the Covid-23 virus successfully i.e. China, Myanmar, and Vietnam*). e.g. is used to give examples (*Many countries in West Africa controlled the virus, e.g. Ghana and Senegal*).

IMPACT You could argue that an *a priori cut-off value* is a technical term and is correct. This is true. However, your aim as an author is to ensure that the maximum number of readers understand what you are talking about. By writing in normal English you will reach a wider readership than you will by using Latin forms.

There is also some disagreement as to what words constitute usage of Latin. I would say although words such as *vice versa, et al* and *per capita*, are derived from Latin, they have become part of English. Consequently: i) they should not be written in italics; ii) most English people would not even know they were Latin (as opposed to expressions such as *ex novo*, *a posteriori ceteris paribus*, and *inter alia*).

46 Readability: When highlighting important information, consider beginning a new sentence or paragraph.

NO!	YES!
1) The majority of the studies focused on the benefits of the weight loss on hepatic steatosis *and* no studies exist specifically designed to assess the role of the weight gain on the development of the liver steatosis in patients affected by inflammatory bowel diseases.	Most studies tend to focus on the benefits of weight loss on hepatic steatosis. *However*, no studies have been specifically designed to assess the role of weight gain on the development of liver steatosis in patients affected by inflammatory bowel diseases.
2) This method would require very precise, perhaps qualitative micro-scale information on agricultural practices, which are impossible to consider at this scale or extent, and which are neither homogenous nor consistent. *It should be noted that even* global data with homogenous and consistent coverage may in some cases cause some problems in classification. This was the case for representing arboriculture, for which ...	This method would require very precise, perhaps qualitative micro-scale information on agricultural practices, which are impossible to consider at this scale or extent, and which are neither homogenous nor consistent. *Even global data* with homogenous and consistent coverage may in some cases cause some problems in classification. This was the case for representing arboriculture, for which ...
3) The optimal number of clusters k is thus the one that maximizes the average silhouette over a range of possible values for k (Kaufman 2020). *We should point out that* not all the variables of the database have been used for all the cluster analysis. The choice of the variable has been based on an iterative method: we started including the largest set of variables.	The optimal number of clusters k is thus the one that maximizes the average silhouette over a range of possible values for k (Kaufman 2020). *Not all the variables* of the database have been used for all the cluster analysis. The choice of the variable has been based on an iterative method: we started including the largest set of variables.

MISTAKE In the first example, the key phrase in the example is 'no studies exist'. But this phrase appears towards the end of the sentence and is introduced by 'and' rather than a word that would alert the reader that something important is now going to be said. If you have something important to tell your reader, don't hide it in the middle of a paragraph and don't use redundant expressions (e.g. *It should be noted that ... It is worthwhile noting that ...*).

SOLUTION i) Begin a new paragraph. ii) Cut any redundant expressions. Signal to the reader that you are about to say something important by using a link word such as: *however, nevertheless, despite this*.

IMPACT Don't underestimate the impact of the layout of your paper and the importance of white space. Readers' eyes are attracted by white space and new paragraphs, they are not attracted by generic words such as *worth* and *note*. By beginning a new paragraph (or sentence) you automatically catch the reader's attention. It also clearly highlights that your paper is well organized and clearly thought out.

Overall your paper is much more likely to make an impact and be memorable if it is short, concise and precise.

47 Readability: When highlighting important information, be as concise and precise as possible. 💣※

NO!	YES!
However, *it should be highlighted* that the employment of ABC scale compared to the use of the criteria described by Smith et al., (2020) did not modify the prevalence of ABC cases in this new study.	However, our use of the ABC scale rather than the XYZ scale described by Smith et al. (2020) did not modify the prevalence of ABC cases.
Special reference needs to be made to the role of TP. The TP concentration is commonly used for the evaluation of the transfer of passive immunity.	*TP plays a key role. // The role of TP is critical.* The TP concentration is commonly used for the evaluation of the transfer of passive immunity.

MISTAKE In the NO examples the author is trying to highlight some important information, but does so in a sentence that will not attract the reader's attention.

SOLUTION i) Use the minimum number of words possible.

Example 1: The word *However* is enough to draw reader's attention to what you are about to say. If you then use a phrase such as *should be highlighted / noted / observed* or *it is worth highlighting / noting / considering*, the impact of *However* will be lost. ii) Be as precise as possible: *the criteria* is vague (will your reader know what Smith's criteria were?). Instead, *the XYZ scale* is precise and avoids the reader having to find out what the *criteria* were.

Example 2: TP is the key word. It needs to be at the beginning of the sentence, not the end.

IMPACT By using few, but specific, words and phrases, the reader is more likely to read and understand what you have written. A short sentence, simply by being short, will attract a reader's attention. So when you have something important to highlight, try and make the sentence as short and precise as possible.

48 Readability: Avoid unnecessary adjectives. Don't say *This is innovative / important / interesting* etc. Instead explain how or why it is innovative.

NO!	YES!
1) Deleting redundancy in academic papers: an *innovative* strategy for the significant enhancement of readability	Enhancing readability and reducing paper length by 20% by deleting non-key words, redundant adjectives, and generic phrases
2) A *novel* means for dealing with pollution caused by plastic.	Plastic debris can be reduced by up to 70% by using a bamboo / resin composite packaging
3)	A *novel* gene containing a trinucleotide repeat that is expanded and unstable on Huntington's disease chromosomes
4) All conditions should be *conscientiously / accurately / suitably / appropriately / properly* tested in order to find any discrepancies.	All conditions should *be tested* in order to find any discrepancies.
5) Their approach provides *an easy, encouraging and promising* way to test ...	Their approach provides *an easy* way to test ... Their approach provides *a rapid way (only 5 seconds per test compared to 10 seconds in other methods)* to assess ... Their approach is twice as fast *(only 5 seconds per test compared to 10 seconds)* to assess ...

MISTAKE Don't fill your text with unnecessary (and often meaningless/overused adjectives).

Examples 1 and 2: These are two titles of papers. *Innovative* and *novel* tell the reader nothing. Instead you should try to explain *how* or *why* your method or results are new. Simply telling the reader that something is innovative (or interesting, or important) is not enough.

Example 3: This is a <u>good</u> use of *novel* because in this case the authors have discovered a new gene, i.e. a gene whose existence had previously been unknown.

Example 4: None of these adjectives add any value, what does *suitably* really mean in this context? Will the reader understand? However, the antonyms of such words, e.g. *inaccurate, inappropriate, unsuitable*, are likely to be much more useful for a reader because they avert the reader to some kind of limitation or mistake.

Example 5: If you have written a pair or trio of adjectives, think whether all of them are needed. They are often just repeating the same idea, so opt for the most pertinent one.

SOLUTION When you re-read a text that contains an adjective, decide whether i) you could simply delete it with no loss of meaning, ii) you could replace it with a phrase that details <u>why</u> something is new or important or interesting. In the case of *significant*, ensure that you are using it in the sense of statistically significant rather than as a synonym for important / noteworthy. If *significant* simply means *important*, then replace it with an explanation as to why what you are saying is important.

IMPACT Using an adjective is often a lazy way to convey an idea that you have in your mind but which the reader may not be clear about. For example, you may know why your results are *interesting*, but the reader may not. Help your readers understand the importance of what you are saying by giving them more information as to why something is interesting.

Note: Many adjectives are so overused that the reader (and search engines) will simply ignore them. Here are the number of times (in millions) that certain adjectives are used in academic work (according to a Google Scholar search): *innovative* 4.2, *appropriate* 5.3, *accurate* 5.7, *novel* 6.2, *interesting* 6.3, *important* 6.6; *unimportant* 0.5, *inaccurate* 2.6, *inappropriate* 2.6. Some adjectives, e.g. *novel* and *innovative*, are actually banned by some journals for use in titles. This is for two reasons: i) the journal wants to encourage you to replace them with a short accurate description as to why something is innovative; ii) the journal knows that search engines do not use such adjectives in their indexes, instead much more specific words are indexed.

49 Readability: If the verb does not give key information, choose the most common / shortest verb possible in order not to distract the reader.

NO!	YES!
In 2020 no significant effect regarding blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah *was detected / observed / found / identified / brought to light*.	In 2020 *there was* no significant effect regarding blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah.
This ladybird is an active predator of nymphs and *is able to travel* between colonies in search of such nymphs.	This ladybird is an active predator of nymphs and *travels* between colonies in search of such nymphs.
To date, data regarding the lack of response to thionamides of AIT1 *are lacking*.	*There are* currently few data regarding the lack of response to thionamides of AIT1.
Marked differences were found in quality and quantity of the results. *A similar problem was absent* in the organic fields, where ...	Marked differences were found in the quality and quantity of. *There was no such problem* in the organic fields, where ...

MISTAKE The NO examples are not grammatically wrong. However, the reader is forced to wait till the end of the sentence to find the verb. Verbs such as *detect* and *lack* are not key words, in the sense that they don't provide the reader with interesting information.

SOLUTION In such cases it makes sense to use *there is/are/was/were*, which don't distract the readers eye (they are very short) and which help the reader to immediately understand what you want to say.

50 Readability: Prefer verbs to nouns in sentences that already contain a high proportion of nouns. 💣☀

NO!	YES!
1) *Heating* of the probe *can be obtained* in two different ways:	The probe *can be heated* in two different ways:
2) Moreover, the *use* of resins and wood from birch, pine and firs to produce tar and pitch *has been ascertained* in various regions of Europe and the Mediterranean area.	Resins and wood from birch, pine and firs *were used* to produce tar and pitch in various regions of Europe and the Mediterranean area.
3) This causes the *losing / loosing* of the advantage of the incineration process, and the *production* of a material that might still be very hazardous for the environment.	This means that the advantage of the incineration process *is lost*, and material *is produced* that might still be very hazardous for the environment.
4) The *application* in the clinical *practice* of the fundus *camera* allows relatively easy *collection* of retinal *images* with the *possibility* of subsequent objective *analysis*.	A fundus camera *facilitates* the collection of retinal images which can then be *analysed* objectively
5) The retina is an excellent window *for the study of* the microcirculation both in physiological and pathological conditions.	The retina is an excellent window *for studying* microcirculation both in physiological and pathological conditions.
6) *Efforts to define* an ideal instrument (objective and non-invasive) for the assessment of retinal vessels have, at least in human medicine, a long history and are linked to the use of computer aided algorithms for measuring the properties of retinal vessels.	*Defining* an ideal instrument (objective and non-invasive) for assessing retinal vessels in human medicine has long been linked to using computer aided algorithms for measuring the properties of retinal vessels.
7) Dogs suffer of a severe disease, canine leishmaniosis *whose management* represents a serious problem.	Dogs suffer from canine leishmaniosis, a serious disease that is difficult *to manage*.
8) However, the seroreactivity in cats is known to *show a wide range of variability*.	However, the seroreactivity in cats is known to *vary widely*.
9) These results are in accordance with literature [40, 41], confirming that the *better performance of SBNs* compared to the TBNs.	These results are in line with the literature [40, 41], confirming that *SBNs perform better* than TBNs.

MISTAKE The first two NO examples are correct English, but the YES examples flow better, sound more English, and are more concise. Example 3 contains a mistake - both *losing* and *loosing* are wrong. You are generally more likely to know a verb (e.g. *to lose*) than a noun (*loss*), so by using verb forms you can also avoid making mistakes in your English. Example 4 contains seven nouns and one verb, the YES version contains three verbs - this creates more variety for the reader. Examples 5-9 show other ways of reducing the number of nouns.

SOLUTION Where possible replace nouns or verb+noun constructions, with a verb.

IMPACT In Example 5 the proportion of nouns to verbs is 5:1, and adjectives to verbs is 3:1. Verbs create variety and a feeling of action rather than stasis. Too many nouns create stodge. No screenplay for a movie or TV series would contain such a low frequency of verbs. TV series and movies are written in a way that is designed to make you keep watching. The same techniques can be adapted even to scientific writing, where the aim is still the same: find a way to make the reader keep on reading. Another issue with nouns is that they are often abstract (unlike verbs). Putting an abstract noun at the beginning of a sentence (Example 6: *efforts*, *the characterization*, etc) is not an intelligent use of a key point in the sentence where a reader typical rests their eye at least momentarily, as the human eye is attracted to white space, full stops and capital letters. In the revised sentences *defining* is more meaningful than *efforts*.

51 Redundancy: The more you write/say, the more mistakes you will make. 💣

NO!	YES!
The changes of animals' color vision are closely linked with *the needs of surviving* (Jones et al., 2021). *Considering colors in fruit as example*, first, fruit contains colorful pigments that convey messages. *For example, ripe apples are red.* We can tell it while without sniffing. *Second, it is a huge advantage of color vision particularly during the time of food shortage* as it enables us to …	Changes in animals' color vision are closely linked to *survival skills* (Jones et al., 2021). *For example, fruits* contain colorful pigments that convey messages, *so we can tell that red apples are ripe without even smelling them. During food shortages*, colors can …
Unlike any other animal, we have a huge capacity of our brain set aside for social understanding and interaction, *even far more than any other ape*. As social animals, *we humans have optimized vision* for sensing physiological changes in other human beings. *In this regard, human eyes* evolved to see colors to detect what another person's feelings by capturing subtle color changes in their skins. For example, *when we see someone's face turns red*, we can know very fast that she/he may be angry.	Unlike other animals, *including apes*, humans have a huge capacity for social understanding and interaction. As social animals, *our optimized vision* senses physiological changes in other human beings. *Our eyes* have evolved to detect another person's feelings by capturing subtle color changes in her/his skin. For example, *when someone's face turns red*, we can quickly understand that she/he may be angry.

MISTAKE When you are talking/writing less technically you tend to make more mistakes. The examples all come from papers, but the same issues also arise in presentations at conferences, emails and project proposals.

SOLUTION In these cases you need to simplify your constructions as much as possible by really controlling your English rather than freewheeling/improvising.

IMPACT You can gain credibility by not improvising with your English and by being more accurate with your grammar, vocabulary, word order etc.

52 Redundancy: Reduce generic words to a minimum.

NO!	YES!
The Quantitative Microbial Risk Assessment *is a framework that allows to calculate* infective/illness risk due to the exposure to microorganisms.	The Quantitative Microbial Risk Assessment *calculates* the infectious/illness risk of exposure to microorganisms.
Fertilization *is an essential practice* to optimize crop productivity.	Fertilization *is essential* for optimizing crop productivity.
Strategies towards controlling bacterial diseases to a manageable level *rely on several basic principles*: eradication, exclusion, therapy, protection and regulation.	Bacterial diseases can be *controlled* to a manageable level *through* eradication, exclusion, therapy, protection and regulation.
The major part (about 50%) of this nitrogen is readily available for the subsequent cash crop.	*About 50%* of this nitrogen is readily available for the subsequent cash crop.
The extraction of sweet glycosides from stevia plant leaves was carried out on dried leaves *following the methodology described by* Jones et al. (2021).	The extraction of sweet glycosides from stevia plant leaves was carried out on dried leaves *following* Jones et al. (2021).
The presence of peak at m/z 426, relative to the molecular ion, *was observed* along with peaks at m/z 411 and 408.	*A peak was observed* at m/z 426, relative to the molecular ion, along with peaks at m/z 411 and 408.

MISTAKE The six examples demonstrate that about 15%–20% of a typical academic text is made up of words and phrases that add no value for the reader.

SOLUTION Write your first draft of a paper, proposal, email, or presentation script without thinking too much about the English. Then rigorously re-read everything that you have written and try and reduce it to the essential, i.e. to what the reader really needs to read, and what the listener really needs to hear.

IMPACT Clear concise English is much easier to remember (whether presented as text or orally) than dense sentences full of padding. If you want to make an impact in your community you need to communicate in the most dynamic yet simple way possible.

Note: In a low-budget movie around 115 hours of film will be shot, at least 50 times more film than is actually used in the final version of the movie. In a high-budget movie, much more film is shot and consequently much is cut. When watching a movie, how often do you notice that something has been edited out (a sentence, a single shot, a whole scene)? Practically never. Likewise, in a research paper, reviewers never comment that a sentence, phrase, or paragraph seems to have been cut. Reviewers may, however, tell you to add an explanation about x or a table on y. Moral of the story: Cut as much as you can. The reader will not notice, but will appreciate, for example, reading a ten page paper rather than a twenty page article.

53 Redundancy: Remove unnecessary synonyms or repeated constructions.

NO!	YES!
1) Business models that can be considered as the "building blocks" of the CE are the followings: i) "circular supplies" – *based on the use of* renewable energy and of bio-based and/or fully recyclable inputs; ii) "resource recovering" – *focused on the recovering* of useful resources materials, by-products or waste; iii) "product life-extension" – *aimed at extending* products' lifecycles by repairing, upgrading and reselling them, as well as through innovation; iv) "sharing platform" – *relied on the possibility to connect* product users to one another and to encourage shared use.	The following business models are the basis of the circular economy: 1) "circular supplies" i.e. *using* renewable energy and of bio-based and/or fully recyclable inputs; 2) "resource recovering" i.e. *recovering* of useful resources from materials, by-products or waste; 3) "product life-extension" i.e. *extending* product lifecycles by repairing, upgrading and reselling them, as well as through innovation; 4) "sharing platform" i.e. *connecting* product users with each other and encouraging shared use.
2) Another non-invasive technique, proposed by Weber, is blah blah blah blah. *The author* observed that in blah blah blah blah. Furthermore, *she* studied blah blah blah blah. Finally, *this German physician* also …	Another non-invasive technique, proposed by *Weber*, is blah blah blah blah. *Weber* observed that blah blah blah blah. Furthermore, *Weber* studied blah blah blah blah. Finally, *Weber* also …
3) Given that nitrogen fixation *has been found to be* sensitive to flooding. Thus soybean nodules *have been found* to have an impaired nitrogen fixation activity when transferred to hydroponic solution [23]. Under these conditions, a reduction in asparagine, in N_2 incorporation in amino acids [24] and in the export of N_2 fixation products in the xylem has *been observed* [25]. An accumulation of ɣ-aminobutyric acid (GABA) has been detected, which *was suggested to* have an amino acid storage role under submergence [26]. These changes *have been found* to be reversible in post-submergence.	Given that nitrogen fixation *is* sensitive to flooding, soybean nodules *have shown* an impaired nitrogen fixation activity when transferred to a hydroponic solution [23]. Under these conditions, reductions in asparagine, in N_2 incorporation in amino acids [24] and in the export of N_2 fixation products in the xylem have been observed [25]. An accumulation of ɣ-aminobutyric acid has been detected, which <u>may</u> have an amino acid storage role under submergence [26]. These changes *seem* to be reversible in post-submergence. In parallel, soybean nodules only *accumulate* few alanine residues under waterlogging, differently from roots [27]. Alanine metabolism activation under hypoxia *may help* prevent pyruvate accumulation in order to facilitate glycolysis during waterlogging [28].

Example 1: The author has used a series of verbs (*based on, focused on, aimed at, relied on*) in order to avoid repeating himself. The problems are: i) he may make mistakes in the use of prepositions associated with the verbs; ii) it also shows a total lack of empathy for the reader, who is forced to read a lot of redundant generic verbs that add no value to the text and will actually distract and irritate the reader.

Example 2 comes from an Introduction to a paper about a German physician named Katrina Weber. It shows extracts from four long paragraphs. When I start reading the second or third paragraphs, I may not remember who 'Weber' is and this will force me to read backwards to find out who 'the author' and 'she' is. In the fourth paragraph I may even have no idea who *this German physician* refers to, it assumes that I know who Katrina Weber is and that she is German.

SOLUTION Repeating key words always using the same format will avoid confusion for your reader.

IMPACT You cannot assume that readers will read every word, every sentence or every paragraph of your paper. In fact, most people skim articles, so repeating the key words (rather than using pronouns or synonyms) will significantly help your readers to navigate your papers. You may argue that repeating *Weber* four times is bad style. However, your main aim is for your readers to understand the content. You can be 100% that by repeating Weber they will understand who is being talked about. By saying *this German physician* you cannot be so certain.

Example 3 shows an exception. The verbs in italics in the NO example are non-key words, so they can easily be replaced with synonyms in order to create variety for the reader (*found* is repeated four times in the NO example).

54 Redundancy: Delete generic phrases. Just be specific. If words in parentheses are important, remove the parentheses.

NO!	YES!
The most part of the vineyards are placed in the hills, *about 85%*, while the remaining are placed in plains (10%) and mountains (5%).	*About 85%* of the vineyards are located in the hills, and the others are on the plains (10%) and in the mountains (5%).
The time required to photobleach the nuclear fluorescence, without destroying too much of the cytosolic fluorescence, in cells spread on glass substrate *is 3–5 s*.	*Three to five seconds* are required to photobleach the nuclear fluorescence, without destroying too much of the cytosolic fluorescence, in cells spread on glass substrate.
The average Bray-Curtis similarity between all pairs of samples was *almost similar, equal to 24.67* in the organic group and 25.23 in the conventional one.	The average Bray-Curtis similarity between all pairs of samples *was 24.67* and 25.23 in the organic and conventional groups, respectively.
Basically, secondary dormancy (cyclically induced), tends to prevent germination *during the less suitable periods (excessive temperatures and/or burial, drought, flooding, etc.)* to complete its biological cycle.	*Cyclically induced secondary dormancy* tends to prevent germination from completing its biological cycle *during excessive temperatures and/or burial, drought, flooding, etc*.
The MXL model is *chosen for its characteristics of flexibility. In fact, MXL model allows to control* for random taste variation, correlations in unobserved factors over time and unrestricted substitution patterns.	The MXL model is *flexible and allowed us to control* for random taste variation, correlations in unobserved factors over time, and unrestricted substitution patterns.

MISTAKE Don't follow a generic phrase with one that specifies what the generic phrase means.

SOLUTION Remove the generic phrase/statement. Consider removing parentheses from around specific examples.

IMPACT By removing generic phrases you will i) help readers to focus on the key points by removing any redundant stuff around it; ii) possibly remove mistakes (*the most part* in the first example is not correct English).

55 Redundancy: Consider using an adjective rather than a noun.

NO!	YES!
Waxes *demonstrate* a high level of *durability* over time.	Waxes tend to be very *durable* over time.
Overall, the chosen genes *presented great stabilities*.	Overall, the chosen genes *were* very *stable*.
They *exhibit a lower sensitivity* in comparison to case estimation through QMRA.	They are *less sensitive* than estimations using QMRA.

MISTAKE Corpus evidence used in the 'Longman Grammar of Spoken and Written English' reveals that in academic writing nouns tend to be used three times more than verbs and adjectives. This ratio is considerably lower than many other languages. Many non-native writers (and native writers too) tend to think that nouns are more suitable in academic writing than adjectives. In reality, too many nouns tend to make a paper dense and difficult to understand. In spoken English, which tends to opt for the simplest terms possible, verbs and adjectives tend to be used almost as frequently as nouns.

SOLUTION One of your aims as a writer is to make your text as reader-friendly as possible. You can do this by limiting the number of nouns you use and replacing them with verbs (see Section 50) or with adjectives (as in the three examples above). By using adjectives you can also eliminate generic verbs (*demonstrate, present, exhibit*).

In Section 48, I mentioned that adjectives are often redundant, but it depends on the type of adjective. Adjectives such as *innovate, interesting, remarkable* are highly subjective and the reader can have no clear idea of what you actually mean. On the other hand, the adjectives used in the YES! examples - *durable, stable* and *sensitive* - have far more concrete meanings and are thus appropriate to use.

IMPACT By replacing noun phrases with adjectival phrases, you provide variety in terms of the grammatical forms you use. Variety makes your writing lighter and more memorable for the reader thus encouraging them to continue reading.

56 Redundancy: Consider (shorter) alternatives for *allow/permit/enable.*

NO!	YES!
1) The highly deformed profiles of both corneas *did not allow to obtain* reliable intraocular pressure values from being from both eyes.	The highly-deformed profiles of both corneas *prevented* reliable intraocular pressure values *from being obtained* from both eyes.
2) This analysis *allows partitioning* a distance matrix among sources of variation and fitting a linear model to it.	With this analysis, the distance matrix among sources of variation *can be partitioned* and a linear model can be fitted to it.
3) The analysis *allowed the characterization* of pine resin as the main organic constituents in the sample *to be achieved.*	The analysis *showed that* pine resin was the main organic constituent in the sample.
4) This *allowed the identification of* six new species which belong to …	This *highlighted* that six new species belong to …
5) This study was carried out by means of direct inlet mass spectrometry and *allowed the authors to reveal* the first evidence that birch bark tar was used for assembling bronze tools during the Iron Age in Europe.	This study was carried out by means of direct inlet mass spectrometry and *provided the first evidence* that birch bark tar was used for assembling bronze tools during the Iron Age in Europe.
6) Samples were submitted to a stabilization process with a polyester resin *which can allow* a very limited increase of about 25% in weight and a compressive strength as high as 1200 Kg/cm^2 *to be obtained.*	Samples were submitted to a stabilization process with a polyester resin. *With this process* a very limited increase of about 25% in weight and a compressive strength as high as 1200 Kg/cm^2 *can be obtained.*

MISTAKE Examples 1 and 2 (*allow* + inf, *allow* + -*ing*) are grammatically incorrect. The correct form is: *to allow someone/something to do something* or alternatively *allow something to be done* (*by someone*). The same construction is used for to *enable* and to *permit*. The three verbs - *allow, enable, permit* - have little difference in meaning. Examples 3–6 highlight how you can create much shorter sentences by using an alternative construction. This is useful because mistakes with *allow, enable* and *permit* are incredibly common.

IMPACT Using a different structure is useful to avoid having to repeatedly use the verb *allow* (*enable, permit*), thus creating variety in your writing. The fewer words you use, the less your reviewers and readers have to read yet they still get the same content.

Chapter 6
Word Order, Sentence Length and Paragraphing

57 Word order: subject + main verb + object + indirect object (all as close together as possible). 💣※

NO!	YES!
1) In the mass spectrum *are also evident peaks* at m/z 438	In the mass spectrum *peaks* at m/z 438, 411, 410 *are also evident*.
2) The *reasons* why this province has a greater groundwater withdrawal *are principally two*.	*There are main two reasons* why this province has a greater groundwater withdrawal.
3) Some *clones*, especially "Orelha de Elefante Mexicana" and "Miúda", *showed*, in laboratory tests, the immunity-type resistance	In laboratory tests *some clones have shown* an immunity-type resistance, particularly "Orelha de Elefante Mexicana" and "Miúda",
4) *The experiments* performed by Smith, following the experience gained in the application of Py-GC/MS, *entailed the study* of lignin oxidation and depolymerization in archaeological wood *by EGA-MS*	After gaining experience in Py-GC/MS, Smith *used EGA-MS to investigate* lignin oxidation and depolymerization in archaeological wood.
5) The P/S ratio *approach*, adopted in a number of studies, *was pioneered* by Mills [45]	The P/S ratio *approach was pioneered* by Mills [45] and has been subsequently adopted in a number of studies.
6) *Various substrates* have been proposed as rooting media for urban trees, that *can resist compaction*.	*Various substrates that resist compaction* have been proposed as rooting media for urban trees.

NO!	YES!
7) A Japanese research group [98] recently described their efforts to detect the development of VOD/SOS in a patient undergoing an unrelated cord blood transplant with *Rectal Portal Scintigraphy.*	A Japanese research group [98] recently used *Rectal Portal Scintigraphy* to investigate the development of VOD/SOS in a patient undergoing an unrelated cord blood transplant.
8) Biodiversity is *defined* as "The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems" *by the Convention* on Biological Diversity of United Nations.	Biodiversity is *defined by the Convention* on Biological Diversity of United Nations as "The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems".

MISTAKE English word order is relatively fixed compared to other languages. This means that native speakers expect the various grammatical forms to be located in a sentence in a predictable order. This order tends to be: subject + main verb + object + indirect object. These four parts should be as close as possible together. When this order is broken, as in all the NO examples, the reader may (temporarily) be unable to follow the logical build up of the sentence.

Examples 1 and 2: The subject comes after the verb in the NO examples (*are peaks, are two*).

Examples 3–5: The verb (*showed, entailed, pioneered*) has been separated from its subject by an intermediary/parenthetical phrase.

Example 6: There are two verbs in this sentence (*proposed, resist*), but the verb that carries the key information (*resist*) is not close to its subject (*substrates*).

Example 7: *Rectal Portal Scintigraphy* is the technique the authors used, but the position at the end makes it seem that it refers to the *transplant*.

Example 8: In the NO example the entity that came up with the definition appears after the definition itself. It is easier to follow if the agent (*the Convention*) of the verb (*defined*) are close together.

SOLUTION Always keep the subject and verb as close as possible together. Always try to put the parts of the sentence into the most logical and unambiguous position possible.

IMPACT By following the subject + verb + object formula you will i) not surprise the reader with an unexpected order; ii) create shorter sentences (you may be forced to divide up your original sentences into two or more sentences). Both these points create a more productive experience for your readers and listeners.

58 Word order: Ensure the reader will understand immediately where the sentence is going.

NO!	YES!
1) Twenty three cats in the control group were excluded from the study because one died during hospitalization, due to the worsening of the underlying disease, *and the other 22 due to a lack of follow up.*	Twenty three cats in the control group were excluded from the study: *twenty two due to lack of follow up* and the other cat died during hospitalization, due to the worsening of the underlying disease.
2) Using weed *density data, species richness,* the Shannon diversity index (HS), the inverse Simpson index of diversity, and Pielou's evenness index (J) *were calculated.*	Using weed *density data, the following were calculated:* species richness, the Shannon diversity index (HS), the inverse Simpson index of diversity, and Pielou's evenness index (J).
3) Xanthomonas campestris is often described as the causal agent of bacterial spot of tomato and pepper *but actually* it was demonstrated that it is not a single taxonomic entity.	*Although* Xanthomonas campestris used to be described as the causal agent of tomato and pepper bacterial spot*, it is not in fact* a single taxonomic entity.
4) Therefore, starting from 2030, those suffering from nocturnal apneas will be able to obtain or renew their driving license *only* by following a precise procedure.	Therefore, starting from 2030, those suffering from nocturnal apneas will *only* be able to obtain or renew their driving license by following a precise procedure.

MISTAKES AND SOLUTION

Reading a research paper is not the same as reading a thriller. The reader needs to know immediately which direction the sentence (i.e. the thoughts of the author) is heading, without any surprises along the way.

Example 1: At first reading, it seems that all the cats died!

Example 2: The initial commas are confusing as they seem to signal that all these items belong to a list. The YES version makes it clear where the real list begins.

Example 3: The NO! example says one thing in the first part, and then contradicts it in the second. Instead readers should be clear from the beginning of the sentence how the sentence is likely to end. So use *although* at the beginning of the sentence to signal to readers that you are about to say something that you will then question in the second part of the sentence.

Example 4: *only* is the key word in this sentence as it completely restricts the phrase *will be able*. Given that *only* contains important information, it needs to be earlier on in the sentence. This will prevent the reader having to revise his/her interpretation of the direction of the sentence.

IMPACT Word order is not merely a grammatical issue. In modern English, the order the words are put in a sentence is (or at least should be) determined by the logical sequence that will be the easiest for the reader to understand. You don't want your readers to change their thought direction in the middle of a sentence.

59 Word order: Put the key concept as near as possible to the beginning of a sentence. Never at the end.

NO!	YES!
An important role in the spread of the bacterium has been associated with the use of *contaminated irrigation water.*	*Contaminated irrigation water* plays a key role in spreading the bacterium.
In this context, the impact of environmental stress, such as soil flooding and waterlogging, on N$_2$ fixation needs to be considered *in order to select resistant legume crops.*	*When selecting resistant legume crops*, the impact of environmental stress, such as soil flooding and waterlogging, on N$_2$ fixation needs to be considered.
Among all considered parameters, *no statistical difference* was found between case heifers and controls.	*No statistical differences* were found in any of the parameters considered between case heifers and controls.
In order to better guide a circularity transition, exploring and understanding the different approaches to circular economy that can be adopted as incremental innovations within the traditional manufacturing business model *is a fundamental step.*	In order to better guide a circularity transition, *it is fundamental* to explore the different approaches to the circular economy that can be adopted as incremental innovations within the traditional manufacturing business model.

MISTAKE The order in which you put the various parts of a sentence should reflect how important these parts are. In all the NO examples, the key information or key point is highlighted in italics. You can see that it is either in the middle or at the end of the sentence.

SOLUTION In a sentence that contains two or more parts, decide which part you want your reader to really focus on. Find a way to put this information as close as possible to the beginning of the sentence.

IMPACT If you write like in the YES examples this will have two consequences: i) the reader is more likely to actually read it because it is in the first position in the sentence; ii) the reader will not be forced to carry secondary information in his/her head before reaching the main point - if readers have to do a lot of carrying, the mental effort involved may become too much and they may simply stop reading.

60 Word order: Shift subject to the beginning of the sentence by deleting redundancy or rearranging the link words.

NO!	YES!
1) *The application of volumetric pricing* as envisaged within the Water Framework Directive (60/2000) represents a relevant challenge for irrigation in Mediterranean regions.	*Volumetric pricing* as envisaged within the Water Framework Directive (60/2000) is a considerable challenge in terms of irrigation in Mediterranean regions.
2) *As pointed out by Smith*, there is a natural tendency to … *It is well established [Smith, 2020]*, there is a natural tendency to …	*Smith noted* that there is a natural tendency to …
3) *As a result, // For this reason* THM/Py-GC/MS data are compared qualitatively and semi-quantitatively to unravel the sample composition.	THM/Py-GC/MS data are *thus* compared qualitatively and semi-quantitatively in order to unravel the sample composition.
4) *For this purpose*, the average monthly number of eggs observed during 2020 in all locations were compared to those of adults captured.	The average monthly numbers of eggs observed in 2020 in all locations were *thus* compared to those of adults captured.
5) *This means that, in order to manage* their reputation effectively, companies should understand the connection between the market environment and the information.	*Managing* their reputation *consequently* entails companies understanding the connection between the market environment and the information.
6) *In the case of* the contact-metamorphic rocks, *the low resistivity value* is most probably related to the intense hydrothermal alteration process	*The low resistivity value* of the contact-metamorphic rocks is most probably related to the intense hydrothermal alteration process
7) *Regarding* Rubisco activase, required for light activation, it has been hypothesized that …	Rubisco activase is required for light activation, and it has been hypothesized that …

MISTAKE Readers tend to focus on the words at the start of the sentence rather than those in the middle. This means that the first position in a sentence should be given to a key word not to a redundant word. I apologize for making this point so many times, but it really is very important.

Examples 1 and 2: *The application of* and *As pointed out by* add no value for the reader. They can simply be deleted. By doing so the key words (*volumetric pricing, Smith*) will automatically be shifted to the beginning of the sentence.

Examples 3–5: The phrases in italics in the NO examples are designed to create a logical link with the previous sentence. However, they occupy the key position in the sentence and delay the subject. In all three cases they can be deleted, and then *thus* (or *therefore* or *consequently*) can be slotted in directly before the main verb.

Examples 6–7: Beginning with *regarding, with regard to, in the case of* etc creates a more complex sentence and also shifts the real subject of the sentence to a later position rather than having it in pole position.

SOLUTION There are two solutions for ensuring that the subject appears at the beginning of the sentence: i) delete any unnecessary words that appear before the subject (1, 2, 6, 7); ii) rearrange the sentence so that the non-key phrase can be integrated later in the sentence (3–5).

IMPACT The aim is to produce a sentence that contains no stodge (i.e. abstract words, phrases). If stodge is removed, then the reader's eyes will be able to locate the important words more easily and rapidly. If stodge is not removed, then the reader will lose sight of the key words amidst a lot of abstract words.

61 Word order: Negations contain key information. Put them as near as possible to the beginning of the sentence.

NO!	YES!
All dogs had no history of chronic diseases.	*None of the dogs had* a history of chronic diseases.
In conclusion, X *seems to be not influenced* by *both* Y *and* Z.	In conclusion, X *does not seem to be influenced* by *either* Y *or* Z.
Choline is an essential nutrient when a *sufficient* supply of folates is *not available* in the diet.	Choline is an essential nutrient *when there is an insufficient / not a sufficient* supply of folates in the diet.
The analysis revealed that *all outcomes were not affected* by the RPC quantity *and* length of its administration before parturition.	The analysis revealed that *none of the outcomes were affected* by the RPC quantity *nor* by the length of its administration before parturition.
When continues variables were considered *any effect* of choline on MY was observed.	When continuous variables were considered, there was *no effect* of choline on MY.
No interactions between batch and dietary treatment were observed for *all* the considered parameters.	*No* interactions between batch and dietary treatment were observed for *any* of the parameters considered.
This kind of situation where blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah blah is *rare*.	It is *rare* to find kind of situation where blah blah blah …

MISTAKE Native speaking readers expect to be told any negative information immediately. If a native speaking reader sees a words that seems to express an affirmative idea (*all, sufficient, seems*) they expect the rest of the sentence to continue in the same way. Instead in the NO examples, the affirmative word or phrase is then counteracted by a negation. This interrupts the flow of the sentence.

SOLUTION Relocate words that express a negative concept as close as possible to the beginning of the sentence.

IMPACT Key information should always be near the beginning of the sentence. A negation is generally key information. A negation can even be an adjective such as *rare* (see the last example) or *difficult, unlikely, improbable* etc. You will lose your readers' trust if you frequently require them to realign their thought process or you delay key information.

62 Word order: Keep <u>the reason for doing x</u> as close as possible to the explanation of <u>how you did x</u>.

NO!	YES!
1) *The observed accurate mass values* (numbers given to three decimal places) are then converted to the Kendrick mass (KM) *to characterize* a series of reference paint materials.	*In order to characterize* a series of reference paint materials, *the accurate mass values observed* (numbers given to three decimal places) are then converted to the Kendrick mass (KM).
2) *To investigate* the effect of the combined use of a hairy vetch cover crop as winter green manure with different types of composts on weed suppression and weed community composition in a subsequent maize crop, *a field experiment was carried out within a long-term stockless rainfed arable crop rotation.*	*We conducted a field experiment* on a long-term stockless rainfed arable crop rotation *in order to investigate* the … *We conducted* a field experiment on a long-term stockless rainfed arable crop rotation. *The aim* was investigate the effect of …
3) *In order to understand* if this anomaly is determined by the lithology and heterogeneities of reservoir rocks and the alterations affecting them (presence-abundance of conductive minerals) and/or by the presence of brines within a fracture net sufficiently interconnected to produce electrolytic conduction, a detailed mineralogical analysis on samples from two wells *was carried out.*	A detailed mineralogical analysis on samples from two wells *was carried out.* *The aim* was to understand if this anomaly is determined by the lithology and heterogeneities of reservoir rocks and the alterations affecting them (presence-abundance of conductive minerals) and/or by the presence of brines within a fracture net sufficiently interconnected to produce electrolytic conduction.
4) *The objective of this study is to examine* the determinants associated with health service utilization *using Andersen's Behavioral Model.*	*Using Andersen's behavioral model, this study examines* the determinants associated with health service utilization.

MISTAKE In all the NO examples the *reason for* doing something (i.e. the aim/objective/goal) is separated by many additional words and phrases from *how* it was done. This means that readers have to hold one set of information in their heads before they understand the connection with the second set of information.

SOLUTION The YES examples put the two sets of information (*aim + how*, or *how + aim*) closer together.

IMPACT Being a good communicator means being sensitive to the best means of communicating information to your readers and listeners. This entails putting yourself in their shoes and understanding how <u>they</u> would like to receive your information, rather than focusing on how <u>you</u> would like to give them this information.

63 Word order: Don't indiscriminately stack nouns together. 💣

NO!	YES!
The *main relational database management system vendors* are:	The *main vendors of relational database management systems*: are
… of the *incoming debris relative velocity*.	… of the *relative velocity of the incoming debris*.
The diagram reveals a *high mistuning level* for most of the modes.	The diagram reveals a *high level of mistuning* for most of the modes.
These principles are still far from being the key-pillars of *firms' French business models and management strategies*.	These principles are still far from being the key pillars of the *business models and management strategies of firms in France*.
Section 2.2 *Food traceability companies perception*.	Section 2.2 *Consumer perceptions of how companies indicate how the food in their products can be traced*.

MISTAKE You cannot indiscriminately put nouns in a sequence - this is NOT a feature of English. You can ONLY put two or more nouns in sequence, if this sequence ALREADY exists, i.e. it has been used by others before you. In most cases (but not all!), the following formula will be correct: *the* + noun + *of* + noun, e.g. *the review of the literature* and *the history of art* are possible alternatives to *literature review* and *art history*. So unless you are sure that the noun + noun sequence is accepted English, I suggest you always use: *the* + noun + *of* + noun.

SOLUTION Note: This problem is not a matter of grammar but only of common usage. In some cases, you will know that such a sequence is possible e.g. *climate change, literature review*. In other cases, you cannot know and so the only way to find out is to use Google Scholar, Word Reference, Context Reverso or something similar.

IMPACT Removing noun strings (i.e. two or more nouns in sequence) helps to make your people much more readable.

64 Sentence length: Divide up a long sentence when it contains two or more distinct ideas. ♠※

NO!	YES!
1) In particular, the base peak at m/z 239 is characteristic of the fragmentation of dehydroabietic acid, *the main degradation marker formed by aromatization of abietadienic acids, the major constituents of raw pine resins.*	The base peak at m/z 239 is characteristic of the fragmentation of dehydroabietic acid. This acid is the main degradation marker formed by aromatization of abietadienic acids, which are themselves the main constituents of raw pine resins.
2) At the beginning we performed 2D and 3D forward modeling of a medium, *where only the lithological discontinuities were taken into account*, and compared the apparent synthetic resistivity and phase curves with our experimental data.	At the beginning we performed 2D and 3D forward modeling of a medium where only the lithological discontinuities were taken into account. We then compared the apparent synthetic resistivity and phase curves with our experimental data.
3) The most common techniques are infrared spectroscopy and X-ray diffraction*; the former, used in 31% of the reviewed papers (total of 210), has the advantages of being more sensitive,* and recognizing the peaks of calcium oxalate also in complex patterns.	The most common techniques are infrared spectroscopy and X-ray diffraction. Infrared spectroscopy was used in 31% of the reviewed papers (total of 210) and is more sensitive. It can also recognize calcium oxalate peaks in complex patterns.

MISTAKES AND SOLUTIONS

All the NO examples are made up of three or more parts.

Example 1: The second part defines the key noun mentioned in the first part. The third part defines the key noun mentioned in the second part. This is heavy and confusing for the reader.

Examples 2 and 3: The subclauses highlighted in italics are again definitions or qualifications of what has just been said in the previous part. Such subclauses interrupt the flow of the sentence for the reader. In Example 2 the subclause separates the two main actions (*performed* and *compared*). The YES example makes it easier for the reader to understand that there is a sequence of actions.

SOLUTION Divide up the sentence. See Section to learn how.

IMPACT Make reading your texts a experience pleasurable for your reader, rather than giving him/her a hard time trying to decipher how the various parts of the sentence relate to each other.

Note: The reason why so many academics use long sentences is that they are much easier to write: they require much less thought by the author. Writing shorter sentences forces you to think more clearly. This clear thinking has obvious benefits for your readers. Short sentences are not an inherent part of the English language. In fact, using a long or short sentence is a matter of choice, it does NOT depend on your native language.

65 Sentence length: Learn the right way to break up a long sentence.

NO!	YES!
1) The main novelty *in the presented case studies* is the unconventional application of analytical pyrolysis, which *has emerged in the last decade* as the golden standard to achieve information on wood and synthetic polymers <u>and</u> *is today proving capable of providing* valuable information on other organic materials in paintings and archaeological residues, allowing unprecedented access to …	The main *novelty is* the unconventional application of analytical pyrolysis, which *is now* a gold standard for obtaining information on wood and synthetic polymers. Analytical pyrolysis *also provides* valuable information on other organic materials in paintings and archaeological residues, thus allowing unprecedented access to …
2) *Moreover, the possibility to interface the pyrolysis set ups* with 2D gas chromatography has been presented for the extensive study of fuels, but it has only been tested on handmade <u>paper, showing</u> potentialities to further applications.	*Pyrolysis has been combined* with 2D gas chromatography for studying fuels, however it has only been tested on handmade <u>paper.</u> <u>It thus</u> has the potential for further applications.
3) *In addition,* in Anglesey, the highest population abundance of bronze bug was *observed* during the seasonal period characterized by the highest presence and traffic of tourists (from August to September), <u>and</u> this probably represents one of the most important phoretic means for its spread, <u>without</u> underestimating the fact that the insect may spread also during other seasons, as no diapause period have been observed for T. peregrinus.	In Anglesey, the highest population abundance of bronze bug was during the seasonal period characterized by the highest presence of tourists (from August to September). This probably represents one of the most important phoretic means for its spread. However, the insect may also spread during other seasons, as no diapause period has been observed for T. peregrinus.

MISTAKE Long sentences are harder to read, absorb and remember than short sentences. It thus makes sense to divide very long sentences (let's say 35 words and more) into shorter sentences (but not too many short sentences – see Section 66).

SOLUTION When you've created a long sentence, deal with it as follows:

 i) delete any redundant words and phrases (Examples 1 and 2);
 ii) find a <u>logical point</u> (or points) where you can divide the sentence into one or more sentences. These logical points are typically: a) commas, b) link words/ conjunctions (e.g. *and, whereas, without*)

IMPACT Shorter sentences are much easier to follow and the logical connections between one phrase or sentence can be made much clearer. The result is increased readability.

66 Sentence length: Short sentences are good, but not every sentence has to be short.

ACCEPTABLE	POSSIBLY BETTER
Very few studies identify the effects of color on decision making. *This is* particularly true in terms of social preference. *However*, there are several studies on the impact of colors on risk preferences.	*While* there appear to be several studies on the impact of colors on risk preferences, there are very few on the impact of colors on social preferences.
Nitrogen uptake by chrysanthemum plants was enhanced by application of biofertilizers. *This* might be due to their stimulation on making better root *architecture. This could also be caused by* the influence of growth hormones contained into seaweed extracts. These substances can increase the ability of nutrients absorption as well as the enzymatic *activity. This is in agreement* with the findings of Alvarez et al. (2020).	Nitrogen uptake by chrysanthemum plants was enhanced by the use of biofertilizers, possibly because they stimulate better *root architecture or due to* the influence of growth hormones contained in seaweed extracts. These substances can increase the ability of nutrient absorption as well as enzymatic *activity, in agreement* with Alvarez et al. (2020).
Nitrogen fixation has been found to be sensitive to flooding. *Thus* soybean nodules have shown an impaired nitrogen fixation *activity. This activity* takes place when the nodules transferred to hydroponic solution.	*Given that* nitrogen fixation is sensitive to flooding, soybean nodules have shown an impaired nitrogen fixation activity when transferred to a hydroponic solution

MISTAKE All the sentences in the left-hand column are correct, easy to understand and can certainly be used (and would be great in an oral presentation as they are quick for the audience to understand and absorb). There is only a problem if most of your paper is made up of short sentences and your reviewers don't like this style of writing. A long series of short sentences can also become a little repetitive for the reader and there is a danger that there may not be a clear connection between all the short sentences.

SOLUTION Consider combining two successive sentences when i) the resulting single sentence would be under 35 words; and ii) if the neither of the original sentences contains key information that you really want the reader to focus on.

IMPACT Variety for the reader.

67 Paragraphs: Consider avoiding a series of single-sentence paragraphs or a series of short paragraphs.

YES OR NO?

We defined the parameters on the basis of our previous experiments. We only changed the heating temperature, increasing it up to 250°C to allow a better adhesion among successive layers, thus improving the strength of the structure and the polymer flow.

The growth evolution was recorded with a camera placed on top of the obstacle. The resulting video was used for post-processing to extract tip orientation and robot path by thresholding using a MATLAB script.

The whole assembly for characterizing the passive adaptation of our root-like robot is presented in Fig. 2A.

We performed and extracted data from four different trials with an inclination θ of the obstacle at 20°, 30°, 40° and 50°, with five repetitions each. From the experiments, we extracted …

MISTAKE The ideal length of a paragraph is extremely subjective. Newspapers in the UK and US and advertising materials tend to use almost exclusively one-sentence paragraphs. Why? Because they are easier to read and absorb. However, many academics believe that they and their fellow academics should uphold 'good' rules for writing, even at the expense of readability. Here is an example from a reviewer who rejected (subject to revision) a paper due to 'poor English' for the following reason: *There is a significant issue with paragraphisation across the article, with many single sentence or very short paragraphs. The authors should consider following guidance on the construction of academic paragraphs (topic sentence, elaborating sentence, evidence, summary - or variations on that).*

Although I agree with the reviewer, there are occasions when i) a one-sentence paragraph or short paragraph is very useful, for example, in the Discussion to highlight the importance of a key finding; ii) a series of short paragraph is useful, for example to divide up a methodology into short steps that the reader can easily follow. The YES OR NO? example is an extract from the Methods section. I think it is perfectly acceptable. The short paragraphs enable the reader to follow the steps more easily. They also help readers to replicate the methods and ensure that no steps are missed out. If all the steps are contained in a single paragraph, the reader might miss one of the steps.

SOLUTION Print out your paper. Look through the printed version and notice if there are too many one-sentence paragraphs. See if any of these can be combined together. If they can, combine them. If they can't, leave them as they are.

IMPACT If you want your paper published, you have to keep the reviewers and editors happy. Reviewers and editors are often quite conservative, and they like certain stylistic norms to be complied with. So keep them happy by avoiding too many short paragraphs.

Short paragraphs are an essential means for getting your readers to focus on key ideas. However, they should not be overused as this seems to create a jolting effect (like being with a learner driver the first time they are behind the wheel and find it difficult to control the movement of the car).

Note: A much more serious and extremely common mistake, in my opinion, is to use very long paragraphs (see next subsection).

68 Paragraphs: Don't use long paragraphs. 💣❇

MISTAKE Long paragraphs are hard to read. The logical steps in the development of your argument are difficult to understand if they are all contained in one long paragraph.

SOLUTION Print your paper. If there are any paragraphs longer than 10–15 lines, divide them up. Begin a new paragraph when you:

- have a list of factors to talk about (this could be previous studies in the Review of the Literature, the steps in a Methodology, the results of each test in the Results about, interpretations/implications in the Discussion) and now you are going to discuss the next factor;

- are at the end of your introduction you say what the paper is about or you talk about how the paper is structured;

- have a subtopic within a main topic;

- move from general considerations to specifics;

- have something important that you want to draw the readers attention to - a new paragraph functions in the same way as saying *however*, *nevertheless*, *on the contrary*, *it is worth noting that*, *interestingly*

NOTE There is not enough space in this book to show you examples of long paragraphs and how to divide them up. So I have created a separate pdf document that you can download from my website: https://e4ac.com/english-for-research/

Chapter 7
Punctuation, Spelling, Using Google

69 Punctuation: Use commas to help your reader understand. But ensure they do not interrupt the flow of reading.

NO!	YES!
1) Note, however, that, in this simple case, the additional memory requirements amount to a single bit.	However, in this simple case, the additional memory requirements amount to a single bit.
2) Users without specific *authority but* with a profile matching one or more *organizations can* access the system but cannot access the data	Users without specific *authority, but* with a profile matching one or more *organizations, can* access the system but cannot access the data.
3) In our *population XYZ* identified the presence of larvae or parasite eggs in 30 dogs.	In our population, XYZ identified the presence of larvae or parasite eggs in 30 dogs.
4) In the *controlled study results* were very similar to those reported from the field study.	In the controlled *study, the results* were very similar to those reported from the field study.
5) After collection, semen was filtered through a sterile *gauze, volume and sperm* concentration (using a counting chamber) were determined.	After collection, semen was filtered through a sterile *gauze. Volume and sperm* concentrations were then determined, using a counting chamber.
6) Considering the scarcity of lands and the increasing of human population, the demand for food especially for animal products will rise fast.	The scarcity of land and the increasing human population is heightening the demand for food and especially for animal products.

MISTAKES AND SOLUTION

Example 1: There are four commas in the space of seven words. By removing *note that*, you can simplify the sentence. *Note* is redundant because the sense of *however* already includes the sense of *note that*, i.e. it signals to the reader that now you are saying something important that may contradict what you have previously said.

Example 2: There are no commas. Instead they are useful for highlighting that you are providing additional information that qualifies the type of *user*.

Example 3: There is no comma. Without a comma, the reader is initially fooled into thinking that *population XYZ* is a single concept, whereas *population* and *XYZ* are two different things.

Example 4: Again no comma, making the reader initially think that *study results* is one concept. This error is compounded by the fact that the definite article is missing in front of *results*.

Example 5: The reader's eye focuses initially on a series of nouns (*gauze, volume and sperm*) and it seems like these three nouns are part of the same list. So this is a case where a period (.) should be used instead of a comma (,).

Example 6: The comma splits the sentence in two, making it appear that there are two concepts. In reality there is only one main subject (*land + population*) and one main verb (*heightening*). By rephrasing the sentence and deleting the comma, the meaning becomes clearer.

IMPACT Punctuation in English today, and particularly in academic writing, should serve exclusively to help the reader make sense of what you are saying. The guidelines mentioned above are those that affect readability the most.

70 Punctuation: Revise any sentences that contain multiple punctuation marks.

NO!	YES!
That is, consumers consider of primary importance how and to what extent the development of energy facilities – often questioned about their impacts, such as geothermal energy facilities – affect the social environment – i.e. the local communities – nearby the facilities themselves.	Consumers thus consider of primary importance how and to what extent the development of energy facilities affects the social environment. In fact, geothermal energy facilities often come under scrutiny with regard to the possible impact on the local communities.

MISTAKE The NO sentence contains 39 words, seven parts, two commas and four dashes (–). This prevents the reader from clearly seeing the relations between the various parts. It also indicates that the author has not taken time to rearrange the sentence to make it flow clearly without the constant interruption of punctuation marks. The NO sentence is an example of 'lazy writing' with no consideration for the reader. A few sentences like the one in the NO example will be sufficient for some readers to give up reading your paper. Reviewers, too, may think it is not worth their time reading your paper, and thus reject it for 'poor English'. This is a serious problem.

SOLUTION Be clear in your head what you want to say. Identify what your key concepts are. Put them in separate sentences. (Even in the author's own language, the structure of the NO sentence would not have been acceptable).

IMPACT You want to encourage your readers to read the entire paper, not to stop because the paper requires too much effort to read. By making your sentences flow using appropriate punctuation, your reader will have a better impression of your paper and is more likely to understand what you are trying to convey.

71 Punctuation: Put a comma before *and* to avoid possible ambiguity. Use semicolons to divide items into groups.

AMBIGUOUS	CLEAR
1) I recognized the professor who opened the conference *and* said 'hello'.	I recognized the professor who opened the conference*, and* said 'hello'. / …, and I said 'hello'.
2) The languages were grouped as follows: Spanish, Italian and Romanian, German and *Dutch and Swedish* and Norwegian.	The languages were divided into three groups as follows: Spanish, Italian and Romanian; German and *Dutch; and Swedish* and Norwegian.
3) There countries involved are: Croatia, Costa Rica, Bosnia and Herzegovina *and* Panama.	There countries involved are: Croatia, Costa Rica, Bosnia and Herzegovina, *and* Panama.

MISTAKE In all three NO examples, the relationship between the various elements in the sentence is not clear. In 1) who said 'hello' - me or the prof? In 2) it is not clear how many groups there are and how which countries belong to which groups. In 3) the reader may not know that Bosnia and Herzegovina is in fact one country (at least at the time of writing this book).

SOLUTION The YES versions clearly highlight the intended meaning by using commas (1, 3), and semicolons (2). They ensure that your reader will not have to read the sentence twice before they can understand the connection between the various items.

72 Punctuation and readability: Be careful of how you use acronyms.

NO!	YES!
A *Database Management System* (DBMS) is a means to … In traditional *DBMS* views are used frequently for different reasons and especially to simplify particularly complex query writing.	A *database management system* (DBMS) is a means to … In traditional *DBMSs*, views are used frequently for several reasons …

MISTAKE When you write the name of something and then put its acronym, this does not mean that you should give each part of the name an initial capital letter, thus: *database management system (DBMS)* is correct, not *Database Management System (DBMS)*. In the second sentence in the NO example, the reader might initially think that *DBMS views* are an entity, whereas in reality the acronym should be plural and in this case a comma should be used after *DBMSs* to clearly indicate that *DBMSs* and *views* are separate entities.

SOLUTION i) Only capitalize the first letters of a name if it is an official entity (e.g. North Atlantic Trade Organization (NATO)). If it is simply the name of a system, procedure, protocol, methodology approach, strategy etc, then no normally initial capital letters are required. ii) If an acronym is plural, remember to add an -s. But if the acronym is acting as an adjective, then no -s is required.

Note: Do not overuse acronyms. Too often authors use acronyms to avoid having to type out the complete words. However, unless the acronym is already well established (e.g. NATO, WHO, EU), the reader will be forced to go back to the first time in the text when you used the acronym in order to understand what it means. If the reader is continually forced to go back, he/she might simply decide to stop reading or to move on to the next paragraph.

73 Spelling: Be consistent with the spelling of the same word. Always do a final spell check.

NO!	YES!
The juice is derived *form* plant extracts.	The juice is derived *from* plant extracts.
The weights are either in kilos or *tons* per hectare.	The weights are either in kilos or *tonnes* per hectar.
Before planting, soil was prepared by deep *plowing*, disc-*ploughing* and harrowing.	Before planting, the soil was prepared by deep *ploughing*, disc-*ploughing* and harrowing.

MISTAKE

Example 1: Some typos cannot be found by a spell checker, both *form* and *from* are regular words.

Example 2: Inconsistency in spelling: *kilos* and *hectars* are metric, *tons* is not metric (*tonnes*).

Example 3: Inconsistency in spelling: *plowing* = US spelling, *ploughing* = GB spelling.

SOLUTION Often a document is made up of several extracts from other documents. This means that although you may have set the spell check for the main text, some of the tables or the appendices may have the spelling check set for your own language rather than English. Ensure that all the parts of your paper have the spelling set to English, and make sure that it is always the same type of English (e.g. US, GB). When doing a spell check make sure you also check the tables. The tables are often created in your own language, so you may need to reset the spelling check to English.

IMPACT Lack of consistency can affect a reader's, and particularly a reviewer's, overall impression. Typos may be interpreted by reviewer's as being a sign that if you didn't check your manuscript then maybe you didn't check your data either.

74 Google: Do not use Google Translate to check your English. 💣

1) NO!

AGE   FRENCH   ITALIAN   **ENGLISH**   ∨   ⇄   FRENCH   ENGLISH   SPA

These informations are important.   ×   Ces informations sont importantes.

2) YES!

DETECT LANGUAGE   **FRENCH**   ITALIAN   ∨   ⇄   **ENGLISH**   SPANISH   ARABIC

Ces informations sont importantes.   ×   This information is important.

3) YES!

AGE   FRENCH   ITALIAN   **ENGLISH**   ∨   ⇄   **FRENCH**   ENGLISH   SPANISH   ∨

This information is important.| ×   Cette information est importante.

4) NO!

FAQ - ANNRO
https://www.annro.dk › faq ▾
These informations are only knows by employees at ANNRO and the delivery companies. No information will be encrypted. No information will be released to ...

F. The property file syntax - ESRF
www.esrf.eu › tango › tango_doc › kernel_doc › ds_prog › node16 ▾
These informations are stored in the Tango database and having them also in a file could generate some data duplication issues. Nevertheless, in some cases, ...

Note: you can see bigger/clearer versions of the screenshots on our website: https://e4ac.com/english-for-research/

MISTAKE AND SOLUTION Google Translate (GT) is exactly what it says, an automatic translator. You cannot and must not use it to check your English. Imagine you are French. You have written the sentence *these informations are* and you want to check whether it is correct English (it is in fact wrong). So as in Example 1, you type in the phrase on the English cell in GT, select French, and then press the button. The resulting sentence *Ces informations sont importantes* is correct, so you are misled into thinking that therefore the English is correct. It is not.

Examples 2 and 3 illustrate the correct use GT. In these examples, GT is being used as a translator not as a checker.

Examples 4 and 5 show what happens if you use a simple Google Search, i.e. by putting "these informations are" in inverted commas. This gives 184,000 results, which may make you think that the phrase must be correct. But for such a common phrases you should be getting millions of results, in fact there are 832 million returns for *this information is*). If you do use a simple Google Search you need to i) use the google.com version (not google.fr, google.it etc); ii) check the urls from the returns - in Example 4 the urls are from Denmark (dk) and Europe (eu). The first ten pages or so should be all from English speaking countries (in Example 5 quorum.

com is a US site). Alternatively the returned website should be related to some grammar/vocabulary site. In Example 4 linguee is a fantastic site, which like https://context.reverso.net, provides examples of the same sentence in two languages.

The best way to check your use of academic English is to use Google Scholar, see Section 75.

75 Google: Learn how to use Google Scholar effectively to check your English.

Note: you can see bigger/clearer versions of the screenshots on our website: https://e4ac.com/english-for-research/

MISTAKE In Example 1 seems to indicate that *these informations are* is correct, given that the citations come from books contained in the Google Books collection, but they are not. The second book was even written by an English person, Lord George Gordon, but note the year - 1787 - the English is outdated, the language has changed since then!

SOLUTION The best solution is to use Google Scholar.

Follow this procedure:

• Note the three vertical lines below. This is a pull down menu:
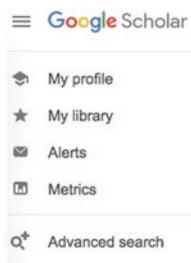
• Select 'Advanced search'. This will bring up the form that you can see in Example 2.

• Fill in the form as shown in Example 2. About 9% of the US population is called Smith, so by putting *Smith* as the author the aim is to filter out non-native English speakers. If you didn't put Smith you would see around 5000 results for *these informations are* rather than just two results obtained by putting Smith (Example 3). Note that in these two results, the first author is not a native English speaker - evidently the co-author Smith forgot to check the English of his/her colleague!

You can use Google Scholar Advanced in combination with https://context.reverso.net and https://www.linguee.com/

Chapter 8
Project Proposals, Journal Submissions, and Emails In General

Check for updates

76 Project proposals: Put yourself in the reviewer's shoes. 💣💣

MISTAKE One of the most serious mistakes you can make when writing a proposal is not to think about the poor person (i.e. the reviewer) who has to read it and judge whether it is worthy of funding. To understand the reviewer's work, it helps to have a clear idea of the review process. The stages listed below have been simplified and are certainly not universal - every review board will have its own procedure.

Stage 1 Each reviewer is given up to 15 proposals. Of these 15, they must choose one or two to 'defend' at the final review meeting. First, the reviewers very quickly screen the proposals and eliminate as many proposals they can. A similar job is done by a recruiter when they read a CV. Typically it takes a professional recruiter no more than six seconds to decide whether a CV should go to the next stage (i.e. to be analyzed in more detail) or be trashed immediately. I was unable to get data on how much time reviewers spend during Stage 1, but I suspect that two or three minutes might be more than enough to decide the value of a proposal.

Stage 2 If the reviewer had 15 proposals in Stage 1, by Stage 2 they have probably narrowed this number down to a shortlist of five or six. They will opt for those proposals that are clearly laid out, and which have clear aims and benefits. The reviewer then selects those proposals that he/she feels are the most pertinent to the call for proposals, and then makes a more detailed analysis.

Stage 3 The reviewer chooses one or two proposals to defend/support/promote at the review meeting. He/She makes a very detailed analysis of why the proposal should be funded.

Stage 4 At the review meeting, the reviewer tries to convince the board that your proposal is the best and will try to find faults in the proposals chosen by the other reviewers.

SOLUTION Reviewers invest a lot of time in Stage 3. Your proposal must be worthy of such a time investment. Most <u>researchers</u> focus on the following: i) subject/topic; ii) background; iii) aims; iv) design; v) timeframe; vi) cost; vii) partners involved and level of experience. However the <u>reviewer</u> is probably asking him/herself different questions: Is the project 'sexy' (i.e. of the moment)? Is it really a problem that needs solving? What does it add to state of the art? Is it original and innovative? How multidisciplinary is it?

Other questions that you need to answer are: How clear are your objectives? (if the reviewers can't understand your aims, they will stop reading your proposal). How feasible and credible are they? How appropriate is the methodology/approach? How realistic are the milestones? How realistic is the cost? Would the potential results justify such a cost? How clearly have the possible results been presented/highlighted? How can these results be exploited in other fields?

In the case of EU-sponsored projects, you also need to think about: How will EU industries benefit from the new knowledge acquired? How will it benefit the EU as a whole? How will it make EU more competitive/prestigious?

IMPACT If you make your proposal as clear and readable as possible you will massively enhance your chances of your proposal being chosen by a reviewer. Also never forget the big picture. Sometimes it can be the big picture that actually gives meaning to a project or to the results of a study. Try always to think outside your academic box!

77 Project proposals: Make your proposal stand out by being reviewer-friendly and by differentiating it from competing proposals. ☙

NO!	YES!
The individual participants involved during the course of this important phase of the project will have the opportunity to constantly rely on a highly effective exchange of ideas and sharing of resources with the associate partners, who, for the entire duration of the project, will help plan, assess, evaluate, and update the research. A meeting with these partners is key part of the scheduling for the beginning of the project, and selected representatives of the partners will be requested to members of the Advisory Board and to participate in the various meetings with the principal investigators in this way they will ensure thereby that valuable and regular feedback is provided on each stage of the project as well as on the overall progress. Last but not least, all the associate partners will disseminate and apply results, outcomes, models, methodologies, technologies and approaches.	The researchers involved will be able to share ideas and resources with the associate partners and members of the advisory board at the six scheduled meetings (see Table 6: meetings schedule). All those involved will be informed of the outcomes of the meetings through a dedicated report. *The steps above are all customary (and important) in major projects.* *However, we also plan to add two new steps: …* [blah blah blah] *We believe that these two steps will significantly …*

MISTAKE A key mistake of academics is to think that they don't have to 'sell' their research. This means that they are often content to write tedious reports and to subject audiences to tedious oral presentations. This leads to an academic style of communicating in which the writer/presenter does not give sufficient importance to how their recipients might actually prefer to receive this communication. They simply expect people to understand the importance of their work, without actually highlighting why it is important.

This also means that such academics have little sense that their work is competing with other work - it is competing for space in a journal, for time at a conference, and for funds. The NO example has two main problems: i) The sentences are long, predictable and boring, containing strings of words that basically mean the same thing. ii) There is no added value for the reviewer. There is nothing that is written that a reviewer can use to convince the review committee that this proposal is worth funding rather than another.

SOLUTION Think about the reviewer - constantly. Try at all times to minimize the reviewer's time and effort in reading your proposal. Think about how you can facilitate his/her work by:

i) Making the reading experience as enjoyable as possible (this doesn't mean he/she has to be entertained, but where you can be concise, be concise)

ii) Using a clear layout that helps the reviewer to focus on what is important. Note the short paragraph (*The steps … projects*) and the use of *However*

iii) Providing the reviewer with the weapons (i.e. the added value of your project) he/she needs to win the battle for funds against the competing projects.

IMPACT It is highly likely that many extremely well-presented proposals written with the reviewer in mind have been allocated funds even though there may have been more worthy projects but which were presented poorly in their proposals.

To learn how to write a bio/CV, which are often required in a project proposal, see:

English for Academic CVs, Resumes, and Online Profiles
https://www.springer.com/gp/book/9783030110895

78 Journal submissions: Check your spelling, punctuation, use of capitalization before sending your paper to a language editing service

NO!	YES!
Accroding the Standards for the Histological Diagnosis of Liver diseases, the hallmarks of the biliary disorders are represented by changes in the portal *tract; nevertheless*, diagnosis of biliary disorders …: *for example* cystic diseases, dilatation of extrahepatic or …; *moreover* cytological examination and bacterial culture of bile facilitate the diagnosis of septic *inflammation; above all* in those cases where where ultrasonographic examination indicates a *cholangiopaty*.	*According* to the *standards for the histological diagnosis of liver diseases*, the hallmarks of the biliary disorders are represented by changes in the portal tract. *However*, diagnosis of biliary disorders … *For example*, cystic diseases, dilatation of extrahepatic or … *In addition*, cytological examination and bacterial culture of bile facilitate the diagnosis of septic inflammation. *This is particularly true* in those cases where ultrasonographic examination indicates a *cholangiopathy*.

MISTAKE Many non-native authors send their paper to English editing agencies in order to ensure that the use of the English language is correct. However, it is not really the job of the agency to correct mistakes that you could easily correct yourself and which are not strictly language related. The NO example contains two spelling mistakes and one repetition: i) *accroding* ii) *cholangiopaty* iii) *where where.* Although an agency editor will certainly find *accroding*, they may not find *cholangiopaty* given that it is a technical word, which the editor may read with less attention.

However, the main problem is that the agency editors will spend so much time correcting spelling mistakes and in this case also miscapitalization (in the first line) and punctuation (the author's continued misuse of semicolons), that the agency editors may miss errors that are immediately before or after the mistake that they have just corrected. For example, having corrected *accroding*, the agency editor may then miss the fact that the word *to* is missing (*according to*). This is a very frequent problem.

SOLUTION Before sending your paper to an agency, do a spelling check - including the technical terms, which you may have to do manually by checking in an online dictionary or with Google. Also make sure your use of punctuation conforms to the norms, see:

English for Academic Research: Grammar, Usage and Style
https://www.springer.com/gp/book/9781461415923

IMPACT You may argue that it is an editing agency's job to correct <u>all</u> the mistakes in your paper. The point is that the agency will do a much better job (e.g. by concentrating on the readability) if they don't get distracted by mechanical errors that the author could easily fix him/herself. The agency editor is also likely to do their job much more efficiently if editing/proofreading your paper does not become a tedious repetitive task of correcting non-linguistic errors. The result is that the agency editor will be able to make your paper much more presentable and ready for publication, and you will benefit as a consequence.

79 Journal submissions: Adopt a neutral style when checking status of your paper. No accusations.

NO!	YES!
Subject line: Paper submission-reply urgently!!	Subject line: Manuscript 1453
Dear Sir/Madam	Dear Editor/Dear Prof Jones
My name is XX and I submitted my paper to you several months ago and I am still waiting to hear from you.	I was wondering if you had received my email sent date (see below) regarding the submission of my manuscript (1453).
This is the third email I have written to discover if my paper was admitted or not. Please answer me in any case.	Please could you let me know whether the paper is under review and when I can expect to receive the reviewers' comments.
Best regards	Attached is a copy of the paper for your convenience.
	Best regards
	[After your name you can include all the previous conversations]

MISTAKE Lack of empathy is the key fault of most badly written emails. Empathy means showing respect and understanding for your reader, by thinking about the information they need and the best way to lay out and express this information. The NO example has a generic subject line (at least generic from an editor's point of view) and is also arrogant (why is it *urgent* and why should you expect an editor to reply immediately?). But worse than the subject line, is the accusatory tone of the email. How will the editor feel on receiving this email? Happy or irritated? Will the editor's ensuing negative state of mind impact on the chances of your paper being reviewed and published? Yes.

SOLUTION Always write your email from the point of view of the recipient. The subject line needs to be relevant to the editor (in this case), not to you. You have no idea of the circumstances of the editor - maybe he/she never received your previous emails, maybe your paper never got uploaded to the website, maybe he/she is in hospital, maybe she has left the journal, or is just very busy. You can't know, so don't jump to conclusions. The YES version is polite (paragraph 1), makes a clear request (paragraph 2), and is proactive by attaching the paper in question (paragraph 3).

IMPACT Rude emails rarely achieve their objective. Clear, well laid-out and polite (or friendly) emails stand a much better chance of being answered.

80 Journal submissions: If you are the reviewer, do not make generic comments about the poor quality of the English. Ensure you give a few concrete examples, or consider not making any comments at all. 💣💣💣

NO!	YES!
The language of the article needs revision.	The English needs editing and proofreading. Below are a few examples that highlight some of the problems. Line 10 misspelling of 'accordance' ('accordance' not 'acrrodance'). This is just one example of many spelling mistakes. Line 14: These informations are (should be: 'This information is') Line 17: …
The manuscript is nice, did very review of the recent works. The major concern is the text editing, there are so many grammar problems, and I tried to do something, but it really drove me crazy. You need do rigorous work of editing.	Although I am a non-native speaker and my English is far from perfect, I have identified what I think are several grammatical mistakes. However, I leave it to the other reviewers and the editor, who may be in a better position than me to make this judgment.

MISTAKE Writing comments like 'the English is poor' without providing examples i) doesn't help the authors in revising their work, ii) doesn't provide the editor of the journal with real evidence that there are really mistakes. The reviewer who wrote the sentence in the NO example, also wrote sentences such as: *There is not recommended use references in Results section* and *Highlights must to be rewritten according guide for authors*. These two sentences are full of mistakes in the English. If you are a reviewer and your own English is not good, then a native-English editor will have less faith in your comments about the poor English of the author whose paper you are reviewing.

SOLUTION FOR REVIEWERS Always provide examples of various types. In the YES example, the reviewer has provided evidence of spelling mistakes and grammar mistakes.

If you are a <u>reviewer</u> and your own English is not good, then consider not making comments about the English of a paper whose authors have non-English surnames. If you are convinced the English is bad (and of course you may be right) then adapt the approach used in the YES example. However make sure you use your own words to express this because if you copy what I have written it will seem that your English is in fact very good!

If you are a <u>non-native editor,</u> if you have contrasting opinions among your reviewers, don't automatically believe the negative opinion. Show the paper to a native speaker before getting the poor author to waste unnecessary time and money.

SOLUTION FOR AUTHORS The next time you receive contrasting comments by two reviewers, send the reviewers' and editor's comments to a native English speaking colleague (or a professional agency). Ask them to quickly judge the level of English of the: i) negative reviewer, ii) positive reviewer, iii) the editor, iv) your abstract. This won't take the native speaker more than a couple of minutes but in cases like the one above it might reveal that: i) the negative reviewer's English is non-native and this reviewer is highly unlikely to be able to judge the English of your paper; ii) the positive reviewer's English is good; iii) the editor is not a native speaker (e.g. he/she has written *english* rather than *English*, which is a typical sign of a non-native speaker). Once you are convinced that the English of your manuscript does not require editing by an agency, then in your rebuttal letter you can write that 'we have taken steps to ensure that the English of our manuscript is up to standard by contacting a professional editing agency' - hopefully the editor will make no further comments.

IMPACT Be honest about your own level of English when reviewing a paper. Your final aim as a reviewer should be to help the authors have their work published, not to block or slow down the process. If you are sure there are mistakes in the English, provide some examples.

81 Journal submissions: Don't delay publication by asking the editors/reviewers questions. Only challenge when strictly necessary.

NO!	YES!
Dear editor	Dear Editor
I thought the paper was fine in terms of grammar and syntax, but you noticed there were some mistakes, so I would like to know where they are in order to solve them and improve the paper.	We found the referees suggestions very useful and have modified the manuscript accordingly.
Moreover you noticed that there were some problems in the figure too, would you mind to suggest me some advice to make them clearer?	• The English has been checked by a professional native speaking editing agency • The figures have been modified, and made more concise.
To conclude I feel the references which you suggested don't fit completely, would you mind explaining why I should include them?	• We have included the suggested references. We hope that you will find the revised manuscript suitable for publication.

MISTAKE When you receive the reviewers' report on your paper your tendency will be to adopt a very defensive approach. This is because you have invested so much time in the manuscript that it is frustrating and disappointing to receive any negative feedback. Thus two solutions that often spring to mind as an immediate reaction to the disappointment are to i) abuse the editor; ii) challenge what the reviewers have said (in this case by asking for clarifications). The first approach is always bad. The second approach should only be used when you are sure that the reviewers are 100% wrong and/or that doing what they suggest would involve weeks or months of unnecessary work.

SOLUTION Go through the reviewers' reports. For each item, decide the cost involved to you of doing what they ask. I chose the three cases above (English, figures, references) because in each case the cost is relatively low and/or the reviewers might be right in their assessment. Reviewers Point 1: There is a good chance that your English does contain mistakes (but also a chance that it doesn't especially if it has been corrected by an agency - see Section 78). Points 2 and 3: It doesn't take much effort for you to do as requested - even if you do not agree that such changes are necessary.

IMPACT The NO example is what an editor does not want to read. It involves extra work for him/her in re-contacting the reviewers involved or in writing another email to you explaining why he/she is not going to contact the reviewers again and has decided to delay your publication until an issue six months ahead to give you time to make the necessary changes. The YES example is what every editor dreams of. He/She is likely to exclaim: *Yes! They have done exactly what they were asked to do. We can publish this paper. Thank you!*

82 Rebuttal letters and emails in general: Always be positive, never angry. 💣☄

NO!	YES!
In the Abstract, Reviewer 2 suggests that we modify the first sentence as follows "…" Is he serious? Does he even have a junior high school diploma? And that's just a tip of the iceberg - he makes numerous absurd comments about the significance of our data. The quality of his work does sucks! Shame on you and your journal!	While we appreciate Reviewer's 2 comments about the English of the paper, we opted not to include his/her suggested modification to the first sentence in the Abstract for the following reason … Of course Reviewer 2 is right to call in to question novel data such as ours. However, we believe that … In addition, Reviewer 1 had no issues with the same data. Below is a list of the changes we have made following Reviewer 2's comments.

MISTAKE When you receive comments back from the reviewers that you don't agree with, you have an opportunity to defend your position. This is called a 'rebuttal letter' and it will usually not just be limited to things you don't agree with, but will also say what modifications you have made and how you intend to deal with them. Your rebuttal is an extremely important letter as it will have a huge impact on whether your paper is finally published or not. It is a natural human instinct to be angry when you receive feedback and criticism that you don't agree with. However, you should <u>never</u> send an email like the one in the NO! example.

SOLUTION When you have written your rebuttal, leave it for at least 24 hours before sending it. As with any letter or email, decide what your ultimate objective is and then ONLY focus on that objective. In this case your objective is to get your paper published. Writing an angry response will not help you in this objective, in fact it is likely to do the exact opposite. So when you have waited 24 hours, go back to your letter and rewrite any negative remarks in a constructive positive way using explanations and solutions.

IMPACT For more details on how to write a rebuttal letter: http://blogs.nature.com/methagora/2013/09/how-to-write-a-rebuttal-letter.html and also:

English for Academic Correspondence
https://www.springer.com/gp/book/9783319264332

83 Journal submissions: Be concise when writing your reply (rebuttal letter) to the reviewers' report.

NO!	YES!
Dear Prof. Rupert Burgess, First of all we thank both reviewers for the time spent for their revision and for their useful observations and recommendations, aimed to improve the style and scientific evidence of results obtained in the study we reported.	Dear Prof. Burgess, First of all we would like to thank both the reviewers for their useful observations and recommendations
Thank you to this reviewer for the careful revision of the paper and the several corrections made. Following these suggestions we completely rewrote some parts or sentences of the paper. We addend in the text all the information required As much as possible we asked to a mother tongue professional for arranging the text again and you will find the reviewed manuscript attached. We really hope that this new version of the manuscript would be more clear and easy to read.	Following your suggestions we have completely rewritten some parts or sentences of the paper. We have added all the information required. We have used the services of a mother tongue professional to revise the manuscript (see attached certificate). We hope that this new version of the manuscript is now clearer and easier to read.
Lines 110 and 111: Thank you for your useful comment. We have re-written the sentence. Line 119: Thank you for your suggestion, which will certainly increase the legibility of the table. We have rearranged the table as you suggested.	Lines 110 and 111: We have rewritten the sentence. *OR* Lines 110 and 111: Done Line 119: Done
We look forward to hearing from you and we are grateful to first and second reviewer again.	We look forward to hearing from you.

MISTAKE You may feel you are being polite by filling your rebuttal letter with lots of positive comments about the reviewers. However, put yourself in the editor's shoes. All he/she wants to do is to see whether you have followed the reviewer's suggestions, and if you haven't he/she wants to understand why. The editor does not expect or wish to read a lot of comments about how well (or how badly) the reviewers have done their job.

SOLUTION Be as concise as possible. This is not considered rude but is the normal way of responding to reviewer's comments. You can limit your 'thank you' to a general statement at the beginning of your letter.

IMPACT The editor will save a lot of time, appreciate your efficiency and thus be positively disposed towards you, and be more likely to accept your paper for publication!

84 Journal submissions: Ensure your English is correct when writing your reply to the reviewers' report.

NO!	YES!
In attachment please find the revised version of the paper entitled XXX, submitted for publication on [journal name]	*Please find attached* the revised version of the paper entitled XXX, submitted for publication *in* [journal name].
The paper was modified accordingly Your suggestions, and in particular:	The paper *has been* modified *following* your suggestions, and in particular:
English was thoroughly checked by a professional native teacher;	*The* English *has been* thoroughly checked by a professional editing agency;
Figures was modified, made more concise and better description have been given in the captions	*The* figures *have been* made more concise and *clearer descriptions* have been given in the captions;
The references you suggested were included in the bibliography and were used to extend the literature review	The references you suggested *have been* included in the bibliography and *have been* used to extend the literature review.
I remain at your disposal for any comments You may want to make.	Best regards.

MISTAKE Cover the YES! example. Focus on the NO! example - what is wrong with it?

The problem is that it is full of mistakes. If you make mistakes in your English (spelling, grammar, vocabulary etc.) in your reply to the reviewers' report, the editor will naturally assume that there are also English mistakes in the manuscript. Note that use the present perfect (*we have made*) rather than the simple past (*we made*) when talking about the changes with respect to the original version. This usage helps the reader to distinguish between the new changes and what you had done previously.

SOLUTION If you submit your manuscript to an English editing service, send them your responses to the reviewers and the email to the editor.

85 Journal submissions: If your paper has been edited by a professional agency but is rejected for 'poor English', don't immediately blame the agency.

NO!	YES!
Dear Adrian	Dear Adrian
If you remember you edited our paper last November. We have finally received feedback from the editor, who as you can see from the attached report, noted that:	… … …
	… … …
Grammatical errors remain throughout the manuscript. We must request that you have your manuscript thoroughly proofread by a native English speaker. Alternatively, please see the following link for a suggested language editing service:	I am attaching the manuscript again - *could you give it a quick look to try and understand where the problem with the English lies?*
	Thanks.
I am attaching the manuscript again for your revision. *I do not expect to be charged a second time*.	

MISTAKE Reviewers often comment negatively on the English. When you receive a negative comment about the English of a paper which has been revised by a professional editing agency, then your first thought is likely to be that the agency did not do a good job. However in the vast majority of cases, I would suggest that there are other far more likely explanations:

i) You made various changes AFTER the editing agency had done their job. The email in the NO example is an email I received from a client. Here is an extract of my reply to the client: *I am attaching the original ms that we corrected last April, along with another file (changes.doc) that highlights the differences between the version we sent you and the version you sent to the journal. The editor points out that there are errors throughout the manuscript and he is absolutely right. In fact, after our initial revision you must have modified the paper, also given the fact that the first version was 23000 characters (with 75 references) and the most recent version is 42000 characters (with 100 references).* Modifications made by the researcher after the agency has done the editing are in my experience the most common reason why reviewers comment on the English - changes made at the last minute almost invariably contain mistakes.

ii) The reviewer is wrong about the English - see Section 80.

iii) The journal has some kind of interest in encouraging you to use the services of their recommended editing agency.

SOLUTION a) Wait a little before sending an editing agency your paper. This will give you time to produce a final version which won't require any additions by you after the agency's editing work; b) Avoid making modifications after the agency's work - or alternatively send the agency any variations to check; c) if you have already used the services of your editing agency without any similar problems in the past, <u>trust</u> them to do a good job. Of course, they are only human and of course they may overlook a few small errors. But the fact is that your manuscript is likely to be read and edited by two people, so it is highly unlikely that a work revised by an agency contains errors <u>throughout</u> the entire text.

IMPACT The YES example leaves the issue open without implicitly blaming the agency. The rationale is that there is always more than one possible explanation for an event. If you write a polite email with no accusations, your recipient is much more likely to want to help you to achieve your aim (in this case to get your paper published).

86 Fake services: Beware of dubious services offered by editing agencies, journals and conference organizers 💧💧💧

There are several illegal or fake services offered to academics. You need to be very careful of them.

PREDATORY JOURNALS There are journals that will email / telephone you to convince you to publish a series of articles with them. They have a particularly dishonest and deceitful strategy. They search for non-native authors (looking for non-English surnames) who have not published many papers. They then write an email to the author. This email begins with flattering but very generic comments about the author's work, for example noting that the author's last paper *captured major attention* within the author's *community*. The second paragraph is designed to gain your trust by explaining why the journal is so important – how often it is cited, its impact factor, its mission to make all papers accessible, and how they have had millions of views / downloads of papers that they have published. The final paragraph then suggests a phone call. The author is flattered to think that he / she has been approached and may thus be willing to agree to a phone call. However, the caller from the journal is counting on the fact that the author, who is a non-native speaker, will be very nervous about speaking in English and not necessarily understand very much. The author may thus agree to do something that they might not have done if they had been speaking in their own language. And what the author may agree to is to publish a series of papers with the journal ... but must <u>pay</u> the journal to do so!

We thus suggest that you ignore any unexpected or unjustified invitations from journals to contribute to their journal.

If you are not sure whether a journal is predatory or not, find out on the internet. There is a very useful blog post here: https://www.rxcomms.com/blog/6-ways-spot-predatory-journal/. And here is a useful link to a comment in Nature: https://www.nature.com/articles/d41586-019-03759-y.

FAKE ENGLISH EDITING AGENCIES There are a lot of fake English-editing agencies with names that are designed to give them credibility. These are not reputable sites and should be avoided at all costs. In some cases your email provider will alert you that they are spam, but not always. These fake agencies will charge you money for a very poor service or possibly no service at all. Always consult with colleagues before contacting an agency.

Also be aware that some journals offer their own editing services. These are completely legitimate services, but the editor may directly or indirectly encourage you to use the editing service offered by his/her journal. We would simply advise you to check whether there isn't a less expensive (but equally qualified) service available. You might also like to check with a native English-speaking colleague as to whether or not your paper really does need editing. (See also Sections 80 and 85).

FAKE CONFERENCES Another money-making scam is soliciting registrations for a non-existent conference. Consider asking a senior colleague before making an 'early bird' registration (i.e. a special discount applied for those who register a long time before the actual date of the conference).

87 Emails: Don't underestimate the importance of writing good emails

Before you write an email decide how important it is. Important emails are, for example:

- to a journal where you want to publish your paper;

- to a professor whose lab you want to work with;

- to a fellow researcher with whom you want to collaborate.

Less important emails (in terms of correctly using English) are, for example: to people you know well, talking about routine issues; hotel bookings; to fellow students. If your email falls into the 'important' category, I strongly suggest you have it checked by a native English speaker.

If it is important then follow these rules:

- Think of a meaningful subject line - otherwise the recipient may not even open your mail.

- Never translate typical phrases literally - learn equivalent phrases.

- Write the minimum amount possible - you will make fewer mistakes.

- Always put the most important point in the first line - otherwise the reader may not read it.

- Better to be a little too formal than too informal - you don't want to offend.

- Always be polite - and remember if there is a minimal chance that your reader will misinterpret or be offended then you can be sure he/she will.

For more on writing emails see:

English for Academic Correspondence
https://www.springer.com/gp/book/9783319264332

88 Emails: Make your subject line as specific as possible, and in the body only include relevant info.

NO!	YES!
SUBJECT: Information Dear Dr Wallwork, I have prepared a text for a conference and I would like to enlist your valuable services to edit and proofread my paper. Please find attached the text. I look forward to hearing from you. Best regards	SUBJECT: Text (2000 words) to edit by Sat 6 June Dear Dr Wallwork, Please find attached an extended abstract (2000 words) for a conference. Would it be possible for you to edit it and return it to me by 10.00 pm CET on Saturday June 6? Best regards

MISTAKE Words such as *Information*, *Request*, *Question* used as subject lines are very unhelpful for people who receive a lot of emails! This is because they provide no useful information as to what the real subject/content of the email is.

SOLUTION Tell the recipient what they need to know. In this case the recipient is me. I edit scientific manuscripts. So I need to know i) the length of the document; ii) when I will be receiving it (or whether it is already attached to the email); iii) when I need to send it back to the author.

Generally speaking: i) Avoid any phrases that add no information (*I have prepared a text*). ii) Be as concise as possible (*edit* instead of *enlist your services to edit and proofread my paper*). iii) Avoid more than writing one salutation: *Best regards* is enough, forget *I look forward to hearing from you.*

IMPACT If you think about your recipient rather than yourself, then you will write much more effective emails. Generally when you write an email you are requesting something from your recipient (unless of course your email is a reply to their email). They are doing something for you. This is a really important concept. When you are asking someone to do something for you, you should: i) motivate them to open your email (*Information* as a subject line is just as likely to make the recipient trash your email as it is to make them want to read it); ii) make it as easy as possible for them to carry out the request and not force them to write back to you for further information, which wastes both their time and yours.

89 Emails: Use the same quality standards in English as you would in your own language. 💣※

NO!	YES!
Please find the attachment of the XYZ Worksheet and the draft report on for the kye finding. urgent for this report to casting the foundation! please And one more, As discussed with ABC, is it blow 160kpa loading capacity no need the legislative investigation report? Please help us confirm again! Thank you very much!	Please find attached the XYZ worksheet and the draft report on the key findings. Could you possibly send me … by 1900 CET tomorrow? One more thing, as discussed with … Thank you for your help.

MISTAKE Writing in a foreign language is hard and time consuming. Unfortunately, but inevitably, the way you write in English will be judged by the reader in the same way as if you had written in your own language and another speaker of your language was reading it. Many people when using Google Translate see the transformation of their language into the target language as a minor miracle! You may gain the same satisfaction when you manually translate from your language into English. This sense of awe and satisfaction may prevent you from seeing your mistakes or from understanding that in fact the English needs to be of the same standard as your native language. The email above was from one colleague to another. The recipient had great difficulty in understanding the content and had the impression that her colleague had not taken time to check his message to her and that this in some way reflected badly on her (if her colleague could not even take the time to check his email this meant that he didn't hold her in much esteem).

SOLUTION Decide whether your email is important or not (see Section 87). If it is important, get someone to check it for you.

IMPACT An email is to some extent an image of you. If it is written in poor English, the recipient may extend that lack of quality to you as a researcher. The example email is full of all kinds of mistakes - it is not the sign of someone who takes their work seriously or who is reliable. On the other hand a good email, written in clear English and correctly laid out and punctuated, will heighten your credibility.

90 Emails: Be specific about deadlines

NO!	YES!
I will send you the text (about 20,000 characters) *around the middle of this week*. Please consider also that it is *quite urgent*.	I will send you the text (about 20,000 characters) on *Wednesday evening, Thursday afternoon at the latest*. I need the edited version back by *Monday of next week* if that is possible for you.

MISTAKE There is a natural human tendency to see everything from one's own point of view. This tendency is often very apparent in emails. The writer of the NO example has an idea of exactly what *around the middle of this week* and *quite urgent* mean - but the reader doesn't.

SOLUTION Be as specific as possible about deadlines. You can even give a range of time, i.e. the earliest and the latest time points.

IMPACT People are busy and have to slot a lot of tasks into a day's work. By giving them a precise idea of when you are sending something and when you want it back, you will increase the chances of your request being fulfilled. If someone is going to timetable a task for you in their diary, they need to know on what day/time to put it, and they are likely to be annoyed if the task does not arrive at the time you specified. If you establish a reputation for keeping to deadlines, people will be happy to work with you.

91 Emails: Be positive and diplomatic when criticizing the work of others. 💣☀

NO!	YES!
I have carefully analysed your presentation and I believe that there are some serious shortcomings.	Thanks very much for getting this first draft ready. I like the presentation - it's looking good.
1) You need to do x.	I think that we may need to make a couple of changes in order to comply with the conference requirements.
2) You need to do y.	
3) Please do z.	1) We could start by writing an introductory part and …
4) Also, I think you should do a …	2) Have you thought about doing x, y, z?
There are a couple of other things which I can tell you next week when we meet.	3) It might be a good idea if <u>we</u> … / Perhaps we could …
Rgds	4) One thing <u>we</u> could do is … / The best solution might be …
	Anyway, I think we're nearly there. // Thanks so much for what you've done so far, I really appreciate it.

MISTAKE The situation of this email is that you and a colleague are jointly preparing a presentation for an international conference. Your colleague has written the first draft and sent it to you. You have found four things that you think need improving.

The NO! example adopts a very superior, critical and unhelpful tone. It is too direct and gives the impression that you are the boss rather than a colleague.

Your aim is to achieve a goal (e.g. to produce a good presentation). Your aim is not to humiliate the other person. You don't know the circumstances of the other person. Maybe they didn't have time to reduce the text or the number of slides. Maybe they were imagining that you were going to write the concluding slide.

SOLUTION Begin (and end) your email be saying something positive - but it must be sincere and believable. Introduce your criticisms gently and justify them (paragraph 2). Always take joint responsibility - use we (Points 1, 3, 4). Ask questions (Point 2) rather than making a direct criticism. End positively. This solution is known as the sandwich technique.

IMPACT People don't react well to criticisms, especially lists of criticisms with no acknowledgement of all the hard word they have done. Instead if you use this formula: *polite encouraging beginning + suggestions with solutions + polite friendly end*, then your recipient will be more receptive to your criticisms, more willing to implement your solutions, and together you will get the job done well.

Chapter 9
Presentations

92 Presentations: Remember all the bad presentations you have seen and accept that your presentation may be no better. 🎯🎯🎯

Note: The slides in this section have been manipulated by me to make particular points. Some of the data reported in the slides are NOT accurate and do not necessarily reflect reality.

MISTAKE We all know what makes a bad presentation, but we seem to be blissfully unaware that we make exactly the same mistakes in our own presentations. Or even if we are aware, we find excuses for our own poor performance: *I didn't have enough time to prepare. ... I know the slides are full of text, but I couldn't find a way to condense them. ... Yes, there are no images, but I couldn't find any non-copyrighted images. ... I even got bored myself while presenting it. ... The presentation was bad even when I presented it in my own language.* It is almost as if we take some kind of pride in the level of the disaster of our presentation, and we also expect others to understand this in the knowledge that they too have been in a similar situation.

Typical mistakes that presenters know that they make, include: but continue to make them anyway:

- No clear structure / No clear message

- No eye contact with audience

- Too much text – hard to find key info

- No images

- Presenter reads the text on the slides - word for word

- Monotone voice + no enthusiasm

- Too long + too many technical details

- Too many animations

- Too small fonts + bad use of color

- No match between what presenter says and what appears on the slides

Other key problems are:

- The final slide has no call to action

- The presenter spent too much time preparing the slides but no time practising them

SOLUTION Before you start preparing your presentation, you need to think deeply about the following:

i) Why did you choose your specific research topic? Simply saying that 'my professor told me to study it', or 'I like the topic' is not enough. You need to look inside yourself. Go back into your past, where was the seed sown? ii) Why is your research important to you, and why should it be important also for your audience and society in general? If you can't think of reasons for this, you will never be able to give a convincing presentation. iii) Why it is important to tell other people about it? Think in terms not only of the benefits, but also what would happen if your research was NOT carried out.

When you've really thought about these questions, then:

- Think about a captivating way to introduce your research in the first few slides.

- Give your audience a clear agenda (you can do this orally, you don't necessarily need a slide).

- Structure your presentation as follows: Description of problem + goals; method; results; implications and limitations.

- Be concise. Only put essential information on your slides.

IMPACT If you manage to put all the above into practice, you will be making a start to becoming a passionate, convincing, interesting, enthusiastic and confident presenter. This will hopefully gain you respect and credibility, people will want to contact you, people will want to work with you, and your publications will be read.

93 Presentations: Don't fill your sides with text. When you've finished your presentation look at it using the option 'slide sequence' - does it look clear and simple? 💣
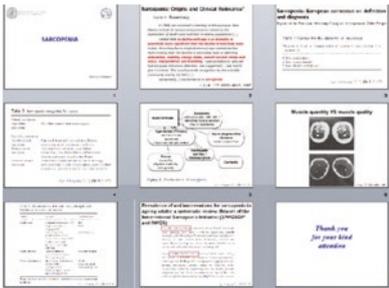
FULL OF TEXT   **CLEAR & SIMPLE**
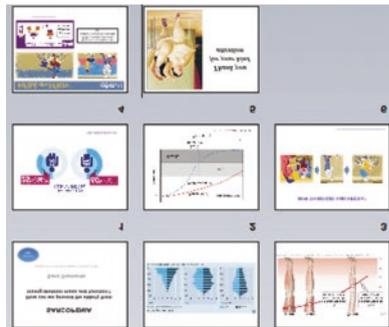
MISTAKE Few people would prefer to watch a presentation full of text rather than one with a mixture of text and images.

SOLUTION When you have created your slides, use the 'slide sequence' option to visualize all the slides together. If your slides look like the ones on the left, do not despair. You have not wasted your time. If you want you can use this text-full presentation to upload on the conference website or on your own website. This will enable people who couldn't come to your presentation to be able to fully understand your research project. This text-full version can also be downloaded before the conference by those members of the audience whose English may not be as good as yours - it will then enable them to follow you and your presentation more easily. Make sure that the text-full version follows the same order of slides as the clear & simple version.

For the 'live' presentation, the text-full version is unacceptable for the audience. And it also makes you as a presenter redundant: what can you say to the audience, when everything that you need to say is reported in the text on your slides? Instead, reduce your text to a minimum and focus on creating an aesthetically appealing presentation, where your job is not to read your slides but to interpret them and add extra information.

94 Presentations: Ensure your title slide will immediately attract the attention of your audience (part 1).

1) NOT GREAT

2) BETTER

3) ALTERNATIVE

EXAMPLE 1

Your title has to attract the attention of your potential audience. 'Research project' provides no useful information. The key words 'drug resistant tuberculosis' (and 'financing mechanisms') are hidden in the text.

What are you going to say? With such a long title, your natural tendency is probably just to read it out. This adds no value for the audience and leads to an expectation for the audience of the usual boring presentation.

The logo is huge. Of course your institute is important, but it could just be highlighted in your final slide. The space that you give each item in a slide, should reflect its importance. Your name is much more important than the logo, consequently your name should be given more space.

The background image is of the researcher's institute. If the institute is internationally renown then maybe it's not a bad idea to have a picture of it. Otherwise something more interesting would be better.

EXAMPLE 2

The title is clear and pertinent. The logo is smaller and thus does not dominate the slide. The name is bigger and is placed in a central position. But the background image is still there and is not very memorable.

EXAMPLE 3

The aim of your title is to attract as many people as possible. A two-part title like this one uses a catchy question or statement to attract people who may be outside your strict field of research. The second part is a more technical explanation. However, this 2-part system means that you may have to reduce the amount that you write in the technical part - in this case the 'different financing mechanisms' is not mentioned. This may not be a bad thing as it gives you something of added value to say when you are talking about your first slide. You could show the slide, pause for 3-4 seconds, and then say: *I am actually going about how different funding mechanisms can affect treatment adherence.* This approach is far better than simply reading your title out.

Consider having photographs on your title slide. But there must be a reason for the photographs - i.e. they are pertinent to your topic. If you can't find any good photos, then don't put them. Also beware of copyright issues - the two photos used in this slide have been used without permission. It's probably a good idea to use non-copyrighted photos.

95 Presentations: Ensure your title slide will immediately attract the attention of your audience (part 2).

1) NOT GREAT

2) GOOD

EXAMPLE 1

The title simply tells the audience the topic. However, there is no indication of what aspect of the topic the presenter will be talking about.

Logos: Think about which logos are absolutely essential. For example, you may have a legally-binding contract to put your sponsor's name. But there is no need to put the conference logo (the audience know where they are!), and you can put your institute and university's logo in the final slide, if you think they are important.

Names: Don't put your name in a list of authors - you can put their names on the final slide as an acknowledgment. On the first slide, there should just be your name (yes, I know that others were involved in the project, but you are the one doing the presentation! However, there is nothing to stop you mentioning their names when you begin your talk). Don't just put the initial of the first name - put the whole name.

Tutors: Unless your tutors are known to your audience, there is no point putting them. Only put them if they will heighten your credibility (e.g. if they are Nobel prize winners!)

Basically, your aim is to create a clean slide where the key information (i.e. the title and your name) stand out.

EXAMPLE 2

This slide only contains essential information. From reading the title the audience will have a clear idea of: i) the topic (sarcopenia); ii) what sarcopenia is (the degenerative loss of skeletal muscle mass, quality, and strength associated with aging - Wikipedia); and what the presenter's work focuses on (how to prevent this debilitating illness). Obviously, if the conference is dedicated to sarcopenia or all the audience are fully aware of what sarcopenia is, then the presenter could chose a more technical title.

Note: The text is in Arial rather than Times New Roman. Arial is one of the easiest to read (and in my opinion the most aesthetically pleasing) of the fonts commonly used in presentations.

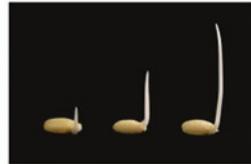## 96 Presentations: Consider having fun titles/double titles.

DULL

FUN

Importance of elongation:
rice germination under anoxia

Chen Wang
Ph.D. candidate

Size is important:
rice germination under anoxia

Chen Wang

CONTACT FORCE DISTRIBUTION IN THE
INTERFERENCE FIT BETWEEN A HELICAL
SPRING AND A CYLINDRICAL SHAFT

Name 1, Name 2, Name 3

Department of Engineering Sciences
University of Modena and Reggio Emilia

WILL THIS FASTENER KILL ME?

Roberto De Nero

MISTAKE A key issue in the world research is the mistaken belief that the main purpose of a presentation is to impart information about your project and results. That is true, but you also need to 'sell' your research, i.e. make your audience want to learn more about it, read your paper etc. Why do people go to presentations? They go to learn the state of the art, to get inspired for their own projects ... but your presentation will stand out more if the audience are also entertained and pleasantly surprised. Your aim is to attract as many people as possible, even those who are not strictly in your field. This will increase your network of contacts. And don't forget those who stand at the door of the presentation room, look in, and decide on the basis of the title slide whether they are going to sit down or go to a parallel session. Such people are unlikely to be inspired by the 'Dull' examples, but they will certainly have their curiosity stimulated by the 'Fun' examples.

Are the 'Fun' examples professional? Yes. These are slides from two students of mine from around 2010 - both students have gone on to become real experts in their field - one in research, and the other founded a very successful engineering business.

SOLUTION It's good to be daring. But if you are not sure with the result or are not confident that you would be able to stand up and look at the audience while they are looking at your slide, then opt for something more conventional.

Note: The two presenters have used a slightly different approach in their fun versions. The first one has eliminated all reference to the technical aspect of the presentation (i.e. nothing about *the contact force distribution*). In doing so he may lose some members of the audience who will have no idea what the presentation is about (if they haven't looked at the conference program). But he has created curiosity, which I think will attract more people than it might lose. The other presenter has opted for a double title. The first part is humorous and is designed to attract attention. The second part is the 'technical' explanation. Both slides, IMHO, contain beautiful photographs - imagine them blown up to a huge screen size, they really will stand out from the other presentations in that session.

IMPACT You will get noticed. Being noticed means that it is then easier for you to make contact with people who you have never met before. You can say: *You may remember me from the XXX conference last year, I was the one with the presentation entitled 'Size does matter'. Well, I was wondering whether ....*

97 Presentations: Background slide: Don't cut & paste paragraphs from other texts.

NOT GREAT

Background

The 2018 WHO report pointed out that there are 10 million new cases of tuberculosis in the world, of which 558,000 are drug-resistant tuberculosis, and the number of drug-resistant tuberculosis cases in China ranks second in the world (13%). The successful treatment rate for global drug-resistant tuberculosis is only 54%.

From 2006 to 2014, global fund projects covered 89 prefectures and cities in 30 provinces in China. Patients enrolled in the project can receive free treatment, medication supervision, health education and other services. After the end of the project in 2014, China's funding sources changed from international funds to government investment. The patient's treatment success rate and compliance have declined to varying degrees.

BETTER

Background

There are 10 million new cases of TB in the world, of which 558,000 are DR-TB (2018 WHO report)

The number of DR-TB cases in China ranks second in the world (13%).

The cure rate is only 53%.

ALTERNATIVE - see next section

EXAMPLE 1

What word attracts the most initial attention in this slide? Answer: 'Background'. This is because PowerPoint encourages you to have big bold headings. But 'background' is not a particular useful word for audiences to see. The presenter could choose a much more specific heading or simply have no heading at all and say: *So this is the background to my study*. And then say nothing for five seconds while the audience absorb the information.

How does the audience react when they see a lot of text? Either they read (while you are reading aloud) or they start looking at their phones. Many presenters lose their audience as soon as they show a slide full of text.

EXAMPLE 2

'Background' still attracts too much attention, but the text has been massively improved.

There is a lot of wasted space in the bottom part of the slide, making the slide look imbalanced. The solution is either to i) shift the text down to the central part of the slide; ii) add more text (but there is probably enough already); iii) add an image.

EXAMPLE 3

See Section 98.

98 Presentations: Presenting and talking about statistics.

GOOD

The above slide is an alternative slide for the Background slide shown in Section 97. I am putting it here because I have quite a few things to say about presenting statistics.

The heading 'Background' is gone. It is unnecessary. It is obvious that this is background info. Instead the speaker could say: *Here are a few facts for you to look at. What do you think the cure rate might be?* The strategy here is:

➢ Don't read out what is written on your slides. Simply pause in silence for a few moments, and let the audience read the info.

➢ The question mark attracts attention. It activates the audience's brains. They will want to know what the answer is and this wanting to know will increase their attention levels. Don't ask the question *What is the cure rate*? You don't actually want the audience to answer (though if this were a university lecture, then you would want students to come up with an answer). You just say: *So the cure rate is only 53%. That means that nearly half of sufferers don't get cured. And that means that …*

Let's talk a bit about statistics.

The key point in this slide is that you i) say the statistic - 53%; ii) you say the statistic in a different way to drive you point home (*nearly half*); and iii) and then you say what the consequence is (*And that means that …*). If you just say a statistic, the audience may not hear it or they may not understand what it means.

Another point about this slide - it doesn't contain EVERYTHING the presenter knows about TB, just a few facts that fit nicely into the slide without making the audience work too hard at reading them. But this does not stop you (i.e. the presenter) having a few more statistics that you can add. You could say for example: *TB is curable. But it is still the second leading cause of death from infectious diseases worldwide. The situation was improving greatly until Covid-19. Many cases were either untreated or unnoticed during the lockdown. The medical world switched attention to finding a cure for the virus. The TB levels tragically returned to what they were in 2013. … Here in China we rank second in the world for TB cases. Deaths from those who are also HIV-positive reach more than 20% in most countries in the WHO African Region. This highlights the inequities both in Africa, but also in a relatively advanced country such as China.*

Note: If you are looking at these slides in color, then notice the 'red/vermillion' color. Did you know that many people find this color very hard to decipher? I would avoid all forms of red in order to help the color blind (1 in 12 men, and 1 in 200 women). If you want to see color versions of these slides then you can access our website: https://e4ac.com/english-for-research/

99 Presentations: Don't overload audience with info. Make your statistics come alive by i) making comparisons and ii) activating your audience's brain.

1

Leaning Tower of Pisa

- There are three leaning towers in Pisa
- Designed by Bonanno Pisano
- Construction begins in 1173 (ends 1370)
- Galileo used it for experiments
- 14,500 tonnes
- Incination of 38 cm
- Only 55.86 m high
- 294 steps
- It leaned 5.5 degrees in 1990
- One million tourists per year
- Five suicides per year
- Over 40,000 scientific articles written about the Tower
- Features in a Superman film

2

	Pisa	Paris
Designed	Bonanno Pisano	Designed for Paris Expo
Weight	14,5000	10,000
Height	55.86 m	320 m (highest building for 41 years)
Steps	294	1665
Changes	5.5 degrees in 1990	Height varies by 15 cm due to temperature changes
Tourists	1,000,000	6,980,000
Cost	€25	€15

3

Pisa   vs   Paris

1. Designed by Bonanno Pisano
2. Construction begins in 1173 (ends 1370)
3. 14,5000 tonnes
4. 55.86 m high
5. 294 steps
6. It leaned 5.5 degrees in 1990
7. One million tourists per year

1. Designed for Paris Expo
2. Intended to be demolished 1909
3. Weighs 10,000 tonnes. The paint weighs as much as 10 elephants
4. 320 m high (highest building for 41 years)
5. Lift cables cut when Hitler visited so he had to walk up the 1665 steps
6. Height varies by 15 cm due to temperature changes
7. 6.98 million (most visited paid monument in the world)

4

Ture or False?

In relation to the Leaning Tower, the Eiffel Tower

1. is six times taller
2. weighs one third less
3. changes height by 15 cm in summer
4. attracts seven times as many tourists
5. costs less to climb

Let's imagine you are an art historian or work in cultural heritage sciences, and you want to give a few interesting statistics about the Leaning Tower of Pisa; or you an engineer describing a new means for preventing the tower from falling. You want a first slide that will attract attention and serve as an introduction to your topic by presenting some interesting statistics about the tower.

There are many ways to present statistics and information in general, which are illustrated in the four examples above. Take a quick look at them and decide which one would be the most effective in a conference presentation. To see the original versions of the slides: https://e4ac.com/english-for-research/

EXAMPLE 1

This slide contains a lot of interesting info for the audience - but it's too much to absorb. And what is your role as a presenter? Do you read the facts out aloud, do you comment on them?

It also contains info that in itself is difficult to appreciate. For example, the tower weighs 15000 tonnes. Most people will have problems visualizing what 15000 tonnes is. And what does <u>only</u> in *only 55.86m high* mean? *Only* with respect to what? To make such statistics come alive you have to compare them with something else. The obvious comparison here is with the Eiffel Tower in Paris, which weighs two thirds the leaning tower but is nearly six times as high.

EXAMPLE 2 AND 3 These two slides present very similar info in different ways. The table is very clear and this slide would work well if it was in the part of the presentation where the presenter is dealing with technical aspects and the differences between the two towers. But in the context of getting the audience interested, it fails (well at least partially). The audience's brain does not have to make any mental effort (in a positive sense) to capture the information. Slide 3 presents similar info with a few more details. It is less easy to read because the points are not aligned.

EXAMPLE 4

The four slides are taken from my presentations courses (https://e4ac.com/courses/). Almost unanimously my students think that Slide 4 works best. This is because it:

1. is quick and easy to read - only five items, so no information overload

2. gets the audience to think before listening to the answers (and thus be more attentive in general throughout the rest of the presentation)

3. allows the presenter to then add other interesting information (e.g. superman, 40000 scientific articles, ten elephants–from Slide 1)

Three other important points:

4. You may argue that this kind of slide (Slide 4) is not serious or professional enough for a conference presentation. But having fun and being professional are not two opposing factors. The point is to find interesting ways to make your messages memorable.

5. It is important to understand that you and your slides have different roles. The slides serve as a prop to help you remember what you are going to say, and they help to focus the audience. But you and your slides need to work together. You don't want your slides taking all the glory. By this I mean that Slide 4 works well because you can add some other exciting information to wow your audience.

6. There are no fixed rules. You should only do what you feel comfortable with. If Slide 2 is what you like to do, and Slide 4 is out of your comfort zone, then stick to Slide 2. However, maybe test out a Slide 4 approach on other occasions, e.g. during lectures rather than at an international conference. You and your audience will have fun using Slide 4. And if you have fun, then I guarantee you will give better presentations and you will feel more relaxed.

SOLUTION

Make a list of all your data and statistics.

Reduce them to 5–8 items.

Show your 5–8 items to colleagues and friends and ask them which items they find most interesting.

Choose a mix of interesting (irrespective of your research topic) and fundamental (i.e. in terms of your research) items.

Decide which items to show on the slides, and which ones you will only express orally.

Find a way to present your data so that the audience is actively involved.

Decide what kind of graphics or other format to present your chosen data.

100 Presentations: Final slide - Writing *Thanks for your attention* is not enough.

1) NOT GREAT
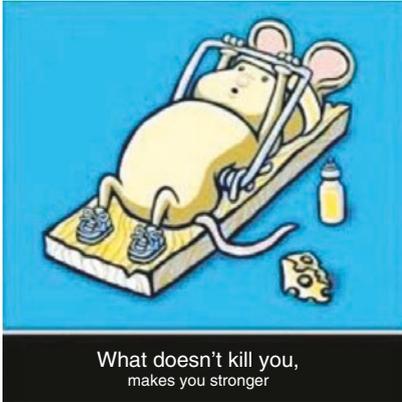
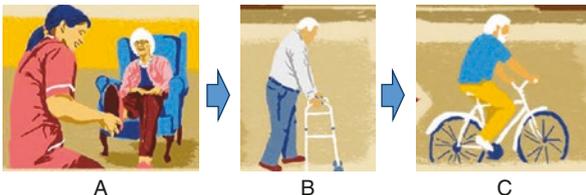*Thank you
you for your
kind attention*

2) STILL NOT GREAT

*Please
contact me
for furuther
info.*

sara.diamanti@unimi.it

3) GOOD

Conclusions: Help me (and them) get from A to C.

A   B   C

sara.diamanti@unimi.it

EXAMPLE 1

How many times have you seen a presentation that ends: *Thank you for your attention*? How memorable is such a conclusions slide? This kind of slide achieves nothing other than telling the audience that the presentation is finally over. The picture is fun but the connection with sarcopenia (i.e. the topic of the presentation) is very obscure.

Note the *you you* - this is quite common when the same word appears on two different lines you may not notice the mistake. If you are the creator of a document it is very difficult for you yourself to see your mistakes. I strongly advise you to i) use an automatic spell checker; ii) show your slides to as many people as possible and get them to find the mistakes.

EXAMPLE 2

And how many times have you seen an amusing photo or picture in the last slide and wondered exactly what the connection is with the presentation? Will such an image + a phrase saying *Please contact me* have such an impact on the audience that they will be galvanized into action and immediately want to contact the presenter (either personally at the conference) or later via email? Unlikely. Will the spelling mistake (*furuther*) boost the presenter's credibility and underline how much time and effort he/she spent on preparing and checking the presentation? No.

EXAMPLE 3

The final slide is the last slide the audience sees. It serves a very special purpose. Its aim is to:

1. wake the audience up and inform them that you are about to finish your presentation

2. encourage the audience to read your publications and maybe to access the full version of your presentation online

3. remind the audience of who you are (and that you are a friendly and approachable person, not just a reliable researcher) and give them the means to contact you

4. provide reasons for the audience to contact you

5. help you set up future collaborations and get funding

The fourth and fifth points are the most important. They highlight that the role of your presentation is not merely to inform the audience about your research project. The aim is to get other researchers and institutes involved. Such institutes may have equipment that you don't have, and they may have the funds to invite you to spend time with them.

So you need to tell the audience why they should contact you/why you need their help. Reasons to contact you include:

- you have encountered some difficulties in your research and need help

- you don't have a particular piece of equipment that maybe someone in the audience has

- you are looking for collaborators (if your institute is in an attractive place from a tourism point of view, then show them a photo to get them tempted to collaborate!)

- you have a limitation (e.g. small sample size) and are hoping that others could enable you to increase the size of the sample

The slide shown in the example has a very clear message. It shows the problem (elderly person with sarcopenia) and it shows where the presenter's research is heading. The title of the slide is a call to the audience for help. The presenter could also add other reasons for contacting her and explain where the audience can find more information about her project. Her email address is big and clear.

About the Authors

Adrian Wallwork is from Manchester (UK) but has spent most of his adult life in Italy. He has taught general and business English, along with academic English to international PhD students. He is the author and editor of the English for Academic Research series, as well as several course books for OUP and CUP, six books for the BBC, Scholastic and BEP. His latest publications are a series of discussion resource books (https://tefldiscussions.com/). Adrian runs a scientific English editing agency (e4ac.com) with his wife Anna Southern.

Anna Southern has a BA Hons degree in French and Sociology, and postgraduate certificates in Development Studies, Public Health, and TEFL. She has worked as: Project Manager for both the British Council and the United Nations, both in the UK and overseas; ii) a freelance researcher for Carlton Television and the charity Crisis; iii) a researcher and Project Manager for the British National Health Service. Her publication record includes four ESL (Japan) books co-authored for the BBC, a photocopiable resource book co-authored for Scholastic, ten programme support guides for Carlton Television, two public reports for the charity Crisis, a community work guide for the National Health Service, a scientific paper for the International Journal of TB and Lung Disease, and a self-published novel entitled *Not At Home*.

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