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Module 1 Grammar basics of Academic writing

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Уникальный программный Whiether they are Nobel Prize winners, Oxford professors, or first-year university c098bc0c1041cb2a4cf926cf171d6715d99a6ae00adc8e27b55cbe1e2dbd7c78 students, all readers prefer sentences that they:

- only need to read once
- don't have to read slowly because the sentence does not require intense concentration
- can process word by word and thus understand the build-up of the author's logic immediately, rather than only being able to reach their interpretation of the whole meaning at the end of the sentence

These goals are much easier to achieve if you write short sentences. The average length of a sentence in English has become shorter and shorter over the centuries. In Shakespeare's time it was about 45 words, 150 years ago, about 29 words, and today's experts recommended between 15 and 18 words. In the world of academic writing, I think you should aim for an upper limit of around 25 words.

The referee of the paper where the following sentence appeared, asked the author to "delete this sentence or rewrite so that it means something sensible". 'Sensible' means something that makes sense. Note: I have changed the key words in this sentence to protect the author, but the structure is identical.

Even if the occurrence of this particular form of pulmonary tumor occurs on a rare basis, since the behavior of these tumors is extremely difficult to predict and the histological features resembling a discrete cell tumor may lead to misdiagnose a C2 tumor as a C1 tumor, it would be of interest to characterize those lesions and to take them into account in the differential diagnosis of hereditary or congenital tumors.

The referee's criticism was very serious. He/She recommended that the sentence be deleted because in his/her opinion it seemed to make no sense. It made no sense because it was one long sentence containing a lot of very different ideas. The problem is that referees do not usually have the time to decipher your sentences and work out the connections between the ideas contained therein. If they do not understand immediately, then this is likely to aggravate them.

The author then rewrote the sentence as follows.

This particular form of pulmonary tumor appears to be extremely rare. Its behavior is extremely difficult to predict. Moreover, the histological features, which resemble a discrete cell tumor, may mean that a C2 tumor is misdiagnosed as a C1 tumor. It would thus be interesting to characterize these lesions and to take them into account in the differential diagnosis of hereditary or congenital tumors.

By breaking up one long sentence into four shorter sentences, the author managed to explain his concepts more clearly. His original sentence contained 71 words. The rewritten version contains four sentences of 11, 7, 22 and 24 words, making a total of 64 words, so less words than the original sentence.

His paper contained one other such sentence - the referee's comment in this case was: "Cut this sentence - it is meaningless as it stands". These two sentences, plus a series of other minor changes to the English, were enough for the referee to recommend an initial rejection of the paper. The cost to the author was a delay of three months to publication. In the meantime another author could have published (but fortunately didn't!) a similar paper and thus deprive him of his 'scoop' (i.e. being the first person to report some new information).

Below are two other examples from other papers. Note how the RVs bring out the meaning much more clearly, by splitting the sentence up into different units of thought.

ORIGINAL VERSION (OV)

Since several organic pollutants, such as PCBs, can bioaccumulate within the trophic web, at a level directly related to environmental levels, and levels within an organism's diet, for an accurate risk assessment, all the information on congener levels in the biota and environment were integrated with ...

Thus for a correct evaluation of environmental risk, the analytical effort has to take a holistic approach, in other words the biomonitoring and the chemical measurements have to be integrated, taking into account the diversity and similarities between organisms and between them and their environment, to have as a complete a vision as possible of all the possible transport routes, and ...

REVISED VERSION (RV)

It is known that several organic pollutants, such as PCBs, can bioaccumulate within the trophic web. This takes place at a level directly related to environmental levels, and levels within an organism's diet. Therefore to get an accurate risk assessment, all the information on congener levels in the biota and the environment were integrated with ...

To assess environmental risks correctly, analyses thus need to take a holistic approach. *Bio-monitoring* and chemical measurements need to be integrated, taking into account any diversity amongst organisms and between organisms and their environment. *This would contribute towards a complete vision* of all the possible transport routes, and

Long sentences contain one or more of the following:

- 1. a link word or phrase (e.g. and, moreover, in fact, although, due to the fact that).
- a list of items, most of which are qualified (i.e. by enumerating their characteristics). This is typical when authors describe a procedure that has many parts or some equipment / software that has many components.
- one or more semicolon or colon, or a lot of commas. This is typical of an author who does not want to waste time organizing his/her thoughts in a way that will be clearer to the reader.

Link words

Link words and punctuation are used either add to or qualify the preceding part of the sentence, or to introduce a new idea. The resulting sentence in all three cases is often too long to be understood easily on a first reading.

Long sentences are caused by adding on too many parts to the main clause. First we need to decide what constitutes a long and complex sentence.

S1. We did several surveys, which all gave the same result.

S1 is ten words long. It is easy to read even though it has two parts (separated by the comma).

However, if we expand it too much it becomes more difficult to read:

S2. *We did several surveys aimed at investigating whether stress increases in proportion to the number of children a couple has and each survey led to the same result, i.e. that there is no correlation, thus confirming the hypothesis that stress in the family is generally connected to factors other than size.

S2 is 51 words long. It is still possible to understand on a first reading but it requires more effort on the part of the reader. Because it is so long, the reader cannot be sure which are the most important elements in it. The reader could assimilate and judge the weight of the information if the sentence were divided up into three parts.

S3. We did several surveys aimed at investigating whether stress increases in proportion to the number of children a couple has. Each survey led to the same result, i.e. that there is no correlation. This confirmed the hypothesis that stress in the family is generally connected to factors other than size.

In S3 the reader can easily and immediately understand the information because it is now presented in three shorter blocks. Basically, you should be able to read a sentence in one breath - try reading S2 aloud without stopping to breathe. It is not easy.

In S2 the words in italics (and, thus confirming) identify where the sentence could be stopped because they are used to add additional information.

So a good general rule is that if the first part of a sentence is more than 12–15 words long, don't add a second part that is more than 10–12 words.

The rest of this chapter examines how to divide up longer sentences into shorter sentences.

In the OV below, *and* is used in two different ways:

- (1) to join two verbs (speak and write) and two nouns (English and Italian)
- (2) to add additional information (and that this is true .. and to this end)

In the first case there is no problem, but the second usage makes the sentence too long (65 words). The revised version rearranges the order in which the information is given, and divides the sentence into three parts.

ORIGINAL VERSION (OV)

The aim of this paper is to confirm that how we speak and write generally reflects the way we think and that this is true not only at a personal but also at a national level, and to this end two European languages were analyzed, English and Italian, to verify whether the structure of the language is reflected in the lifestyle of the respective nations.

REVISED VERSION (RV)

How we speak and write generally reflects the way we think and act. *This* paper aims to prove that this thesis is true not only at a personal but also at a national level. *Two* European languages were analyzed, English and Italian, to verify whether the structure of the language is reflected in the lifestyle of the respective nations.

The OV below contains three ideas that are linked together using and, thus creating one long sentence.

ORIGINAL VERSION (OV)

The treatments are very often expensive and technically difficult, and their effectiveness very much depends on the chemical and physical characteristics of the substances used for impregnation, and on their ability to ...

REVISED VERSION (RV)

The treatments are very often expensive and technically difficult. *Their* effectiveness very much depends on the chemical and physical characteristics of the substances used for impregnation. *Also important* is their ability to ...

The RV replaces the first *and* with a full stop - which is generally the simplest way to reduce the length of a sentence. The second occurrence of *and* cannot simply be replaced by a full stop. Instead, the writer uses *also* to alert the reader of additional details and then uses *important* to recall the concept of effectiveness.

Sentences containing multiple uses of *and* are often found in the materials and methods sections of a paper. It is much easier for readers to understand what materials you used and what procedures you followed if you divide your descriptions into short sentences. Each sentence should only cover one or two items or steps – however see Sect. 15.4 for cases where this is not applicable.

- S1. *All samples were collected at the same time (9 AM) every day to prevent any effects of possible circadian variation and then stored after treatment at 4°C until assay.
- S2. All samples were collected at the same time (9 AM) every day to prevent any effects of possible circadian variation. *They* were then stored after treatment at 4°C until assay.

In S1 readers initially think that the *and* clause is going to introduce a second prevention. Readers then have to revise their perception when they realize that *and*

actually introduces the next step. S2 resolves this initial ambiguity by beginning a new sentence to highlight that the author is now talking about a different step. Here are two more examples that illustrate the same point.

ORIGINAL VERSION (OV)

Seeds, sterilized for 3 min in NaOCl (1% available chlorine) and rinsed with distilled water, were germinated on moist filter paper (Whatman No. 2) in Petri dishes and grown in the dark at 23°C.

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.

REVISED VERSION (RV)

The seeds were sterilized for 3 min in NaOCl (1% available *chlorine*), and rinsed with distilled water. They were then germinated on moist filter paper (Whatman No. 2) in Petri dishes and grown in the dark at 23°C.

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.

as well as is used to add some additional information. It is often used as an alternative to and when the sentence might otherwise contain too many ands and would thus confuse the reader. If using as well as will create a very long sentence, it is best to break the sentence. However you cannot begin the new sentence with as well as. Instead you have to repeat some part of the previous sentence, as in the two RVs below

ORIGINAL VERSION (OV)

This finding could be explained by the specific properties of gold, silver and platinum *as well as* by the conditions in which these metals were found, for example silver was found in ...

REVISED VERSION (RV)

- (1) This finding could be *explained* by the specific properties of gold, silver and platinum. *Another explanation could be* the conditions ...
- (2) ... silver and platinum. *The conditions* in which these metals were found could *also* be an *explanation*. For example, ...

You cannot always break up a long sentence that contains a link by beginning a new sentence using that link word. This is because not all link words can be used at the beginning of a sentence. For example, when *whereas* is used to compare two findings in one long sentence, it should be replaced with *on the other hand* when the sentence is split into two.

ORIGINAL VERSION (OV)

The levels of cadmium in Site C were comparable to the levels found in Sites A and B in the previous years, whereas / on the other hand the levels for copper were much lower in Site C with respect to the values found in the previous sampling campaigns in 2008 and 2010.

REVISED VERSION (RV)

The levels of cadmium in Site C were comparable to the levels found in Sites A and B in the previous years. *On the other hand*, the levels for copper were much lower in Site C with respect to the values found in the previous sampling campaigns in 2008 and 2010.

The use of *although* and *however* is the same as with *whereas* and *on the other hand*, respectively.

ORIGINAL VERSION (OV)

The levels of cadmium in Site C were comparable to the levels found in Sites A and B in the previous years, *although / however* this was not the case for the levels found in the south-east part of Site C.

REVISED VERSION (RV)

The levels of cadmium in Site C were comparable to the levels found in Sites A and B in the previous years. *However*, this was not the case for the levels found in the south-east part of Site C.

Although can only be used in a two-part sentence, where one part depends on the other. For example:

Although this book was written for non-native speakers, it can also be used by native speakers.

In the RV above, *although* would not be possible because there is no dependent clause.

These link words are used to explain the reasons for 'something' that has just been mentioned (S1) or is about to be mentioned (S2). The 'something' to be done in the examples below is to simplify a procedure.

- S1. *It was found necessary to make some simplifications to our procedures (essentially we did A, B and C), due to the difficulties in measuring the weight of the various compounds, particularly with regard to the weights of X, Y and Z.
- S2. *Owing to the difficulties in measuring the weight of the various compounds, particularly with regard to the weights of X, Y and Z, it was found necessary to make some simplifications to our procedures, essentially by doing A, B and C.

In such cases, it might be clearer for the reader if you split the sentence into three (S3).

S3. We encountered difficulties in measuring the weight of the various compounds, particularly the weights of X, Y and Z. We thus decided to make some simplifications to our procedures. This entailed doing A, B and C.

Words such as *since* and *although* are often used in a subordinate clause at the beginning of a sentence, as in S1 below.

S1. *Since English is now spoken by 1.1 billion people around the world and is used as a lingua franca in many international business and tourism scenarios between people of different languages and between native English speakers and non-native speakers, the learning of foreign languages in the United Kingdom has suffered a huge decline.

The problem with S1 is that readers are forced to carry an idea in their head before they understand how this idea relates to the idea in the main clause (in italics). It would be much easier for readers to understand if S1 was split into two parts and rewritten as in S2.

S1. English is now spoken by 1.1 billion people around the world and is used as a lingua franca in many international business and tourism scenarios between people of different languages and between native English speakers and non-native speakers. The consequence is that the learning of foreign languages in the United Kingdom has suffered a huge decline.

Like *although* (see Sect. 3.8) the link words *since* and *as* require a dependent clause. For example:

Since / As you are a PhD student, you probably have to write a lot of papers in English.

This means that *since* and *as* could not be used in the RV below.

ORIGINAL

The chemical characterization of organic paint materials in works of art is of great interest in terms of conservation, *because / since / as* the organic components of the paint layer are particularly subject to degradation.

REVISED

The chemical characterization of organic paint materials in works of art is of great interest in terms of conservation. *This is because / In fact* the organic components of the paint layer are ...

which is used to add information. For example:

- S1. English is now the world's international language, which is why it is used in scientific papers.
- S2. English, *which* has now become the world's international language, is studied by more than a billion people.
- S3. English, [which is] now spoken by more than a billion people, is the world's international language.

In S1 *which* is used to introduce an additional piece of information (in this case an explanation). In S2 *which* gives some extra information about the subject of the sentence (the English language). In S3, *which* serves the same purpose as in S2, it is in brackets because it could be cut.

In all three cases, the meaning is quick and easy to understand because the sentences are quite short.

Problems arise when sentences are longer, as highlighted in the OV below.

ORIGINAL VERSION (OV)

English is now the world's international language and is studied by more than a billion people in various parts of the world thus giving rise to an industry of English language textbooks and teachers, which explains why in so many schools and universities in countries where English is not the mother tongue it is taught as the first foreign language in preference to, for example, Spanish or Chinese, which are two languages that have more native speakers than English.

REVISED VERSION (RV)

English is now the world's international language and is studied by more than a billion people in various parts of the world thus giving rise to an industry of English language textbooks and teachers. This explains why in so many schools and universities in countries where English is not the mother tongue it is taught as the first foreign language. For example, English is taught in preference to Spanish or Chinese, which are two languages that have more native speakers than English.

In the OV the introduction of two new pieces of information using *which* makes the sentence unnecessarily long (79 words). In the RV, the first occurrence of *which* is replaced by *this*, which stands for *this fact*. Using *this* either alone or associated with a noun (e.g. *this fact*, *this decision*, *this method*) is a very common and useful way to reduce the length of a sentence.

The OV below contains an example of the use of *which* as in S2.

ORIGINAL VERSION (OV)

English, which has now become the world's international language and is studied by more than a billion people in various parts of the world thus giving rise to an industry of English language textbooks and teachers, is generally used in scientific papers.

REVISED VERSION (RV)

- (1) English is generally used in scientific papers. In fact, English has now become the world's international language and is studied by more than a billion people in various parts of the world. This has given rise to an industry of English language textbooks and teachers.
- (2) English has now become the world's international language and is studied by more than a billion people in various parts of the world. This has given rise to an industry of English language textbooks and teachers. Today, English is generally used in scientific papers.

In the OV, the subject (*English*) and the main verb (*is*) are separated by 35 words. This means that by the time readers reach the main verb, they may have forgotten what the subject is.

There are two ways to resolve this problem. In the first RV, the author has decided to make scientific papers the key topic, so now this appears at the beginning of the sentence rather than at the end. In the second RV, the author first gives some information about English and then talks about scientific papers. The choice of using the first or the second technique, will depend on the emphasis you want to give to each piece of information.

The OV below contains an example of the usage given in S3. Even in short sentences, this kind of usage is dangerous as you may not know whether you can or cannot omit *which*.

ORIGINAL VERSION (OV)

English, [which is] now spoken by more than a billion people from all over the world, the biggest populations being those in China and India, and more recently in some ex British colonies in Africa, is the world's international language.

REVISED VERSION (RV)

English is the world's international language. It is *now spoken* by more than a billion people from all over the world. The biggest populations are those in China and India, and more recently in some ex British colonies in Africa.

The OVs below show two other examples where *which* has been omitted. Note how the words *area* and *distinction* are repeated. This repetition is not considered bad style in English scientific writing.

ORIGINAL VERSION (OV)

Using the method described by Peters et al. (2010), we assessed the state of pollution of three sites in a coastal area [which was] characterized by high levels of agricultural, industrial and tourist activity, as well as occasional volcanic activity (the last major eruption was in 1997).

Using the approach described by Smith and Jones (2011), a distinction, [which was] useful for analysis purposes, particularly in the final stages of the project, was made between the three types pollution: agriculture, industry and tourism.

REVISED VERSION (RV)

Using the method described by Peters et al. (2010), we assessed the state of pollution of three sites in a coastal area. *This* area *is characterized* by high levels of agricultural, industrial and tourist activity, as well as occasional volcanic activity (the last major eruption was in 1997).

Using the approach described by Smith and Jones (2011), a distinction, was made between the three types of pollution: agriculture, industry and tourism. This distinction was useful for analysis purposes, particularly in the final stages of the project.

Another way writers typically link phrases together is to use the - *ing* form a verb. If using the - *ing* form will significantly add to the length of a sentence, you can use another form of the verb and begin a new sentence.

ORIGINAL VERSION (OV)

Using automatic translation software (e.g. Google Translate, Babelfish, and Systran) can considerably ease the work of researchers when they need to translate documents *thus saving* them money (for example the fee they might have otherwise had to pay to a professional translator) and *increasing* the amount of time they have to spend in the laboratory rather than at the PC.

REVISED VERSION (RV)

Using automatic translation software (e.g. Google Translate, Babelfish, and Systran) can considerably ease the work of researchers when they need to translate documents. Such software saves them money, for example the fee they might have otherwise had to pay to a professional translator. It also increases the amount of time they have to spend in the laboratory rather than at the PC.

The RV above shows two ways to deal with the - ing form. First, you can repeat the subject (software) and then change the -ing form into the present tense (saves, increases rather than saving, increasing), or whatever tense is appropriate.

In the OV below, the - *ing* form is used instead of a relative clause: the author could have written *which indicates*. In such cases, you can break the sentence immediately before the - *ing* form and then start a new sentence with *This*.

Often you need to explain the rationale for adopting a particular procedure or line of research. To do this, writers typically use expressions such as *in order to*, *with the purpose of, with the aim to, in an attempt to*

This is fine if you can express the rationale in a few words, as in this example: In order to test our hypothesis, we sampled a random selection of documents.

But if your rationale is longer than about 15 words, you probably need to split the sentence up, as shown below:

ORIGINAL VERSION (OV)

Our readability index is based on a series of factors - length of sentences and paragraphs, use of headings, amount of white space, use of formatting (bold, italics, font size etc.) - in order to provide writers with some metrics for judging how much readers are likely to understand the writers' documents.

In order to establish a relationship between document length and level of bureaucracy and to confirm whether documents, such as reports regarding legislative and administrative issues, vary substantially in length from one language to another, we conducted an analysis of A, B and C.

REVISED VERSION (RV)

We wanted to provide writers with some metrics for judging how much readers are likely to understand the writers' documents. We thus produced a readability index based on a series of factors - length of sentences and paragraphs, use of headings, amount of white space, and use of formatting (bold, italics, font size etc.).

- (1) We conducted an analysis of A, B and C. The aim of the analysis was to establish
- (2) We wanted to establish a relationship between .. language to another. To do this, we conducted ...

The two techniques shown in the RV are

- · either say what you did and then why you did it
- · or give your rationale and then say what you did

The first is generally more helpful for the reader because it helps to put the rationale in context.

When commas are used in lists, they are fine:

Many European countries are now part of the European union, these include France, German, Italy, Portugal, Spain, ...

However, when commas are used to separate various clauses within a sentence, readers have to constantly adjust their thinking. Also, the more commas there are in a sentence, the longer the sentence is likely to be.

ORIGINAL VERSION (OV)

As a preliminary study, in an attempt to establish a relationship between document length and level of bureaucracy, we analyzed the length of 50 European Union documents, written in seven of the official languages of the EU, to confirm whether documents, such as reports regarding legislative and administrative issues, vary substantially in length from one language to another, and whether this could be related, in some way, to the length of time typically needed to carry out daily administrative tasks in those countries (e.g. withdrawing money from a bank account, setting up bill payments with utility providers, understanding the clauses of an insurance contract). The results showed that ...

REVISED VERSION (RV)

Our aim was to see if there is a direct relationship between the length of documents produced in a country, and the length it takes to do simple bureaucratic tasks in that country. Our hypothesis was: the longer document, the greater the level of bureaucracy.

In our preliminary study we analyzed translations from English into seven of the official languages of the European Union. We chose 50 documents, mostly regarding legislative and administrative issues. We then looked at the length of time typically needed to carry out daily administrative tasks in those countries. The tasks we selected were withdrawing money from a bank account, setting up bill payments with utility providers, and understanding the clauses of an insurance contract.

The results showed that ...

The OV demonstrates that the excessive use of commas is a sign of lazy writing. The writer simply begins a sentence and keeps adding details to it, without thinking about how the reader will assimilate all these details. It also indicates that the writer is probably not clear in his / her own mind about what he / she wants to say.

Note that the RV:

- · uses more words in total, but is considerably easier to follow
- rearranges the various subordinate clauses and puts them into a more logical order and in separate sentences
- divides up the information into paragraphs the first explains the rationale, the second shows how the investigation was carried out. This makes the connection between ideas much clearer

Commas can also be dangerous if you use them to build up a series of phrases each of which describes the previous one, as in S1.

S1. In particular, the base peak is characteristic of the fragmentation of dehydroabietic acid, the main degradation marker formed by aromatization of abietadienic acids, the major constituents of pine resins.

Initially when reading S1 it seems that the *peak* is a *characteristic* of a series of items separated by commas. Then as we read further we understand that *the main degradation marker* is not in fact a second element in a series of items. Given that *the main degradation marker* comes immediately after *dehydroabietic acid* we assume that this acid must be a *marker*. We then realize that in fact it refers back to *fragmentation*. S1 thus requires much interpretative effort by the reader and is better rewritten as in S2:

S2. The base peak is characteristic of the fragmentation of dehydroabietic acid. *This fragmentation* is the main degradation marker formed by aromatization of abietadienic acids, *which are* the major constituents of pine resins.

S2 divides S1 into two separate sentences and also clarifies the relationships between the various elements.

Semicolons (;) are not commonly used in modern English. If you tend to use a semicolon before introducing an additional idea or additional information, think about using a period (.) instead.

By 1066 English, or Old English as it is known, was firmly *established; it* was a logical language and was also reasonably phonetic. This situation changed dramatically when England was invaded by the Normans in *1066; in* fact, for the next 250 years French became the official language, and when English did come to be written again it was a terrible concoction of Anglo-Saxon, Latin and French.

The author of the above extract used semicolons to show that the two parts of the sentence to some extent depend on each other. Although this usage could be considered correct, today it is considered as unnecessary. Thus the two semicolons could easily be replaced by full stops, with no change of meaning for the reader.

When we read we automatically pause for an instant when we reach a full stop. This is our mental equivalent to pausing and inhaling air when we are speaking. Semicolons don't allow for such a pause and thus make the reading process slightly more tiring. Semicolons also make the sentence look longer, which makes them more tiring on our eyes.

Some writers also use a colon (:) in the same way as a semicolon. Again, if your sentence is going to be very long as a result of using a colon, it is better to replace the colon with a full stop and begin a new sentence.

- S1. Old English had two distinct advantages over Modern English: it had a regular spelling system and was phonetic.
- S2. Old English, which is the language spoken in most parts of England over 1,000 years, was a relatively pure language (the influence of Latin had not been particularly strong at this point, and the French influence as a result of the Norman Conquest was yet to be felt) and had two distinct advantages over Modern English: it had a regular spelling system and the majority of words were completely phonetic.
- S3. Old English was the language spoken in most parts of England over 1,000 years. It was a relatively pure language since the influence of Latin had not been particularly strong at this point, and the French influence as a result of the Norman Conquest was yet to be felt. It had two distinct advantages over Modern English: it had a regular spelling system and the majority of words were completely phonetic.

In S1 the use of the colon (:) is fine, because the whole length of the resulting sentence is less than 20 words. But S2 is already too long even without the subsidiary clause introduced by the colon. S2 would in fact be better divided up into three parts as in S3.

The only time you really need to use semicolons is to divide up short lists to show how each element in the list relates to each other. Note how S2 is clearer than S1 through the helpful use of semicolons.

- S1. *The partners in the various projects are A, B and C, P and Q, X and Y and Z.
- S2. The partners in the various projects are A, B and C; P and Q; X; and Y and Z.

S2 shows more clearly that there are four groups of partners: (1) A, B, C; (2) P, Q; (3) X; (4) Y, Z.

But if your list is long, as in the OV below, it is better to divide it up into shorter sentences.

ORIGINAL VERSION (OV)

Our system is based on four components: it has many data files (the weather, people, places, etc.); it has procedures which it tries to use to combine these files by working out how to respond to certain types or patterns of questions (this entails the user knowing what types of questions it can answer); it has a form to understand the questions posed in a natural language (so the user may need to know English) which it then translates into one of the types of questions it knows how to answer; finally, it has a very powerful display module, which it uses to show the answers, using, graphs, maps, histograms etc.

REVISED VERSION (RV)

Our system is based on four components. Firstly, it has many data files, for example the weather, people, and places. Secondly, it has procedures which it tries to use to combine these files by working out how to respond to certain types or patterns of questions and this entails the user knowing what types of questions it can answer. Thirdly, it has a form to understand the questions posed in a natural language, which means the user needs to know English. It then translates the natural language into one of the types of questions it knows how to answer. Finally, it has a very powerful display module, which it uses to show the answers. These answers are shown using graphs, maps, histograms etc.

The RV is longer than the OV but it is much clearer for the reader because it:

- uses six short sentences rather than one long one. The semicolons have been replaced by full stops.
- clearly distinguishes the four components by using firstly, secondly etc.
- removes the brackets

Phrases in parentheses can considerably increase the length of a sentence. Parentheses are best used just to give short lists that act as examples. For example:

Several members of the European Union (e.g. Spain, France and German) have successfully managed to reduce their top tax threshold from 42 to 38%.

In the example above the information in parentheses does not interrupt the logical flow of the sentence and it does not occupy much space.

Parentheses should be avoided when giving explanations or examples that are not lists. For example:

ORIGINAL VERSION (OV)

Using automatic translation software (e.g. Google Translate, Babelfish, and Systran) can considerably ease the work of researchers when they need to translate documents thus saving them money (for example the fee they might have otherwise had to pay to a professional translator) and increasing the amount of time they have to spend in the laboratory rather than at the PC.

REVISED VERSION (RV)

Using automatic translation software (e.g. Google Translate, Babelfish, and Systran) can considerably ease the work of researchers when they need to translate documents. Such software saves them money, for example the fee they might have otherwise had to pay to a professional translator. It also increases the amount of time they have to spend in the laboratory rather than at the PC.

In the OV the first use of parentheses is fine, but the second interrupts the flow of the sentence and considerably adds to its length.

Structuring paragraphs and sentences

Every paper has a title and the readers know where to find it, i.e. at the top of the first page of the paper. Readers know that the title will be followed by the Abstract and at (or towards) the end of the paper they expect to find the Literature Cited.

Just as readers have certain expectations with regard to the structure of the entire paper, they also have expectations with regard to how a section, paragraph and a sentence should be structured. These expectations are less conscious or explicit than expectations regarding the position of a title and the abstract. However they are based on how readers usually find and receive information in a section, paragraph and sentence.

Each paragraph is like a microcosm of a paper – it has its own title (the topic sentence), the intermediate sentences are like the sections of the paper, and the last sentence is like the conclusions.

A well-structured paragraph in any other part of a section (i.e. not the first paragraph) is thus generally as follows:

- A topic sentence that tells the reader what the paragraph is about and in some way connects with the previous paragraph.
- 2. From one to eight sentences in a logical sequence that develop the topic.
- A concluding sentence, possibly referring back to the first sentence or forward to the next paragraph.

The three elements of this structure are dealt with in detail in the subsections below. Your aim is to show readers how your paragraph fits in with what came before and what is coming after. You need to organize your information for the reader, rather than the reader trying to organize the information that you have given him / her. Only one specific idea should be covered in each sentence, and only one general idea in each paragraph.

Known information is traditionally placed at the beginning of a sentence or paragraph. Below are the first three sentences from the abstract of a fictitious paper entitled 'Readability and Non-Native English Speakers' intended for a journal dedicated to communication in the world of business.

VERSION I Readability formulas calculate how readable a text is by determining the level of difficulty of each individual word and the length of sentences. All types of writers can use these formulas in order to understand how difficult or readable their texts would be for the average reader. However, readability formulas are based purely on what is considered difficult for a native English speaker, and do not take into account problems that may be encountered by non-natives. In this paper ...

The first word, *readability*, is one of the author's key words. It immediately alerts the reader to the topic of the sentence and of the abstract (and paper) as a whole. However, the information contained in it is not new - readability formulas and their indexes are well established in the literature on business communication.

The role of the first two sentences is thus to set the context and gently guide the reader into the paragraph. The third sentence then introduces the new element, i.e. the fact that readability indexes do not take into account non-native speakers. The third sentence thus highlights the problem that the paper intends to tackle.

However, the abstract could have begun like this:

VERSION 2 Current readability formulas are based purely on what is considered difficult for a native English speaker. They fail take into account problems that may be encountered by non-natives. One thousand five hundred PhD students from 10 countries were asked to evaluate the difficulty of five technical texts from their business discipline written by native English speakers. Three key difficulties were found: unfamiliar vocabulary (typically Anglo-Saxon words), unfamiliar cultural references, and the use of humor. The paper also proposes a new approach to assessing the level of readability of texts to account for such difficulties.

In Version 2, the author still begins with his key word, *readability*. But he precedes it with *current*, which signals to the reader that the author will then probably propose an alternative. The author also assumes that his readers will be aware of what a readability formula is, so he feels he doesn't need to mention it. Thus, in the second sentence he immediately underlines a critical problem with current formulas. In the third sentence he then tells his readers what his research was and then what was found.

Version 3, below, contains only new information.

VERSION 3 Unfamiliar vocabulary (typically Anglo-Saxon words), unfamiliar cultural references, and the use of humor: these, according to our survey of 1500 PhD students, are the main difficulties non-native speakers have when reading a business text in English. Our

results highlight the need to adjust current readability formulas in order to take non-native speakers into account. The paper also proposes a new approach to assessing the level of readability of texts to account for such difficulties.

This version is designed to immediately attract the reader's attention. In contrast, the first 50 words of Version 1 contain no new information at all. Version 2 has 40–50% new information or more, depending on whether readers are familiar with the limitations of readability formulas with regard to non-natives.

So, which version should you use?

The best version to use depends on two factors:

- 1. the section of the paper
- 2. what you are trying to achieve

Version 1 would only be appropriate in an Abstract if the journal where it is being published does not usually deal with communication and / or readability indexes. In this case the readers need the context to be set for them. It might be more acceptable in an Introduction in a slightly more specialized journal. In an Introduction the aim is not principally to attract attention, if readers are reading your Introduction you can presume that you already have their attention.

So the information contained in Version 1 would be used in an Introduction just to remind the readers of the context. This is a very typical way to begin an Introduction - it is what readers expect and therefore it is generally a good technique.

Version 2 would be appropriate as an Abstract or Introduction in a specialized journal on business communication.

Version 3 would only be appropriate in an Abstract and exclusively in a very specialized journal. It can only be used if you have clear findings, or a clear new methodology, to report. It works very well because it does not force readers to read background information that they are probably already familiar with.

You might also choose Version 3 as an Abstract for a congress. In such cases you are competing for the attention of the referees who will use your Abstract to decide whether to include your contribution at the congress. If your Abstract is accepted, you will then be competing with other authors / presenters in motivating the audience to come and watch you rather than a parallel session.

In many languages Versions 2 and 3 would not be acceptable. In the words of one of my Greek PhD students:

New information in Greek comes at the very end. The rule is that first the author gives extensive background information and only at the end he / she introduces the new concept. This is the generally accepted (and considered correct) way of writing.

This means that when you write in English you may be going against what is considered good style in your own language. But don't let breaking a taboo stop you from expressing yourself in the way that will best highlight your results and thus attract more readers.

S1 and S2 begin with the same subject *English*, which is the main topic of the sentence. They then present the same two pieces of information, but in a different order.

- S1. English, which is the international language of communication, is now studied by 1.1 billion people.
- S2. *English, which is now studied by 1.1 billion people, is the international language of communication.

In both cases if you removed the 'which' clause (in italics) the sentence would still make sense. But if you removed the final clause it wouldn't. This would seem to indicate that the final clause is where we locate the most important information. Thus the relative position of the various parts of the phrase tells the reader the relative importance of the information contained on those parts.

In S1, the order of the information tells you that the fact that English is the international language of communication is old news, but that 1.1 billion people is new information that the reader probably does not already know. Thus, the order of the information in S2 is a little strange because it puts the new information (1.1. billion people) before the old information (international language).

Readers tend to focus on the first and last words of a sentence, so avoid placing your most important information in the middle of a long sentence. Readers don't want to make an effort to identify the key points, they want to be told immediately.

Here are some more examples that show how by changing the order of information within a sentence you can achieve a different effect:

- S3. English is now studied by 1.1 billion people, though this number is expected to drop with the rise in importance of Chinese.
- S4. Although English is now studied by 1.1 billion people, this number is expected to drop with the rise in importance of Chinese.

S5. Although the importance of Chinese is expected to lead to a drop in the numbers of people studying English, 1.1 billion people still study English.

S3–S5 all contain the same information, but the weight that this information is given varies.

In S3 the reader learns some information. This information is then qualified with *though*, which is used to introduce some new information that the author imagines that the reader does not know.

In S4 the reader is immediately alerted to the fact that the information contained at the beginning of the sentence is going to be qualified by new information in the second part. The order of the information in S4 is thus more logical than in S3.

In S5 the writer assumes that the reader already knows the importance of Chinese and instead focuses on the fact that despite the increase in the number of Chinese speakers, English is *still* studied by a lot of people. 'still' is the key word and it is located very close to the end of the sentence.

In S1–S5 there are two parts to each sentence, and the writer gives more emphasis to the second part. Sometimes, you may want to give equal weight to the two parts.

- S6. English is the international language of communication. It is now studied by 1.1 billion people.
- S7. The importance of Chinese is expected to lead to drop in the numbers of people studying English. Despite this, 1.1 billion people still study English.

In S6 and S7, the writer wants the reader to notice and absorb the two pieces of important information separately. She does this by presenting the information in two distinct sentences. This device should not be used too often because it can lead to a series of very short sentences, which after a while begin to sound like a list.

A key issue when linking up sentences in a paragraph is to decide how to link one sentence to the previous one. The following is an extract from the beginning of a paragraph from a paper on pollution in soil. It fails to make a strong impact because of its lack of logical progression.

(S1) The *soil* is a major source of *pollution*. (S2) Millions of *chemicals* are released into the environment and end up in the soil. (S3) The impact of most of these *chemicals* on human health is still not fully known. (S4). In addition, *in the soil* there are naturally occurring amounts of potentially *toxic substances* whose fate in the terrestrial environment is still *poorly known*.

S1 puts the soil as the topic of the sentence. S2 is more specific and talks about the quantity of this pollution - millions of chemicals. S3 reports the impact of the chemicals mentioned in S2. But S4 does not continue this logical progression from general to increasingly more specific. Instead, it begins by putting soil in the topic position. This breaks the logical progression, because soil was the topic of S1. The following sentence would be a good replacement for S4, which would thus continue the logical structure developed in S1-S3.

S5 There are also naturally occurring amounts of potentially toxic substances in the soil whose fate in the terrestrial environment is still poorly known.

The formula is thus:

- 1. S1: main topic (soil) introduces subtopic 1 (pollution)
- 2. S2: subtopic 1 is specified by introducing subtopic 2 (millions of chemicals).
- 3. S3: subtopic 2 is specified introducing subtopic 3 (*impact of these chemicals*).
- 4. S4: a further / related aspect of subtopic 3 is introduced via subtopic 4 (*impact of toxic substances*, *i.e. chemicals*, *is poorly understood*).
- 5. etc.

Basically each sentence is link in a chain. A full chain is a paragraph. And a series of linked chains makes up a section.

This concept of a chain of logical progression is not common to all languages. Here is what Nobel Prize Winner in Physics, Tony Leggett, notes about Japanese:

In Japanese it seems that it is often legitimate to state a number of thoughts in such a way that the connection between them, or the meaning of any given one, only becomes clear when one has read the whole paragraph or even the whole paper. This is not so in English; each sentence should be completely intelligible in the light of what has *already* been written. Moreover, the connection between one thought and the next should be completely clear when it is read; for instance, if you deviate from the 'main line' of the thought to explore a side-track, this should be made clear at the point where the sidetrack *starts*, not where it finishes.

ORIGINAL VERSION (OV)

Memory can be subdivided into various long-term memory, which involves retaining information for over a minute, and short-term memory, in which information is remembered for a minute or less, for example, the memory required to perform a simple calculation such as $5 \times 7 \times 3$. Another type of shortterm memory is also recognized: sensory memory, for example we see a video as a continuous scene rather than a series of still images. Research shows sex differences in episodic (i.e. long term) memory: women tend to remember better verbal situations, whereas men have a better recollection of events relating to visuals and space. Long-term memory can be further subdivided into recent memory, which involves new learning, and remote memory, which involves old information.

REVISED VERSION (RV)

Memory is the capacity to store and recall new information. It can be subdivided into two main types: short-term and long-term. Short-term memory involves remembering information for a minute or less, for example, the memory required to perform a simple calculation such as $5 \times 7 \times 3$. Another type of short-term memory is sensory memory, for example, we see a video as a continuous scene rather than a series of still images. Longterm memory can be further subdivided into recent memory, which involves new learning, and remote memory, which involves old information. Interestingly, research shows sex differences in remote memory: women tend to remember better verbal situations, whereas men have a better recollection of events relating to visuals and space.

In the OV, the beginning of the first sentence gives the illusion to the reader that the various types of memory will be introduced in a logical order. In reality a rather random selection of information is given, with no clear sequence. This makes it hard for the reader to follow. The RV uses shorter sentences and follows a much more logical series of steps:

- (1) definition of memory given
- (2) clear indication of the number of types of memories (OV various types, RV two main types)
- (3) short-term memory mentioned first, as later in the paragraph long-term memory will be developed in more detail
- (4) additional information about short-term memory (the discussion of short-term memory ends here)
- (5) returns to second topic (long-term memory), which is then subdivided into recent and remote
- (6) interesting fact about remote memory

In the RV, each sentence extends the information given in the previous sentence, and the reader can sense the logical progression. The author presents a list of topics at the beginning of a paragraph that he intends to discuss further in the later part of the paragraph. He then deals with the topics in the same order and format as he initially presented them: first short-term memory, then long-term.

Your aim is to provide readers with a step-by-step approach to enable them to understand your reasoning. It must be clear from the beginning of your sentence what this logical progression is. This means that at mid point or end point in a sentence, readers should not have to change their perspective of this logical progression. OVs 1–5 below are all correct English, but they don't help the reader to follow your logical flow.

ORIGINAL VERSION (OV)

- 1 It is important to remark that our components are of a traditional design. *However*, we want to stress that the way the components are assembled is very innovative.
- Working in this domain entails modifying the algorithms as we are dealing with complex numbers.
- 3 Therefore, the rescaled parameters seem to be appropriate for characterizing the properties, *from a statistical point of view*.
- 4 The number of times this happens when the user is online is generally *very few*.
- 5 Documentation on this particular matter is almost *completely lacking*.
- 6 *Consequently we found this particular type of service not interesting.

REVISED VERSION (RV)

Although our components are of a traditional design, the way they are assembled is very innovative.

Since we are dealing with complex numbers, working in this domain also entails modifying the algorithms.

Therefore, from a statistical point of view, the rescaled parameters seem to be appropriate for characterizing the properties.

This *rarely* happens when the user is online.

There is *virtually no documentation* on this particular matter.

Consequently we did not find this particular type of service interesting.

The RVs all provide signals to the reader about what they can expect next.

In OV1 readers initially think that *traditional design* is the key information that the author wants to give them. The author then introduces new information that completely contrasts with the preceding information. In such cases, you need to forewarn your readers of such contrasts by using a linker that introduces a qualification, such as *although*, at the beginning of the phrase (as in RV1).

In RV2 and RV3 the author immediately tells readers the point of view he wants them to assume, whereas in OV2 and OV3 this key information is only given at the end of the sentence. The strategy adopted in RV2 also enables you to present the information in chronological order: (1) what we already know (2) new information.

In the OVs 4–6, readers initially think that something affirmative is being said, but then they have to readjust their thinking when the negation is introduced at the end of the sentence. English tends to express negative ideas with a negation. This helps the reader to understand immediately that something negative is

being said (RV4 and RV5). OV6 is incorrect English because the verb and the negation (*not*) have been separated. Generally *not* is located immediately before the verb.

When you need to describe the various stages in a procedure, methodology, project and so on, it helps to use a numbering system. For example, first(ly), second(ly), third(ly), finally. It is also important to continue your numbering system in the same way that you started it, and not to abandon it. Compare these two versions:

ORIGINAL VERSION

Our methodology can be divided into three main parts: first of all the characterization of demographic changes between 2000 and 2010, in order to obtain a scenario for the future with regarding to population shifts. The results from this first part were used as inputs to obtain maps for 2010 to 2015. The resulting maps and input maps regarding climatic and political characteristics were inserted into our model in order to predict future patterns.

REVISED VERSION

Our methodology can be divided into three main stages. *Firstly*, we characterized demographic changes between 2000 and 2010, in order to obtain a future scenario for population shifts. *Secondly*, we used the results from the first part as inputs to obtain maps for 2010 to 2015. *Finally*, the resulting maps along with input maps regarding climatic and political characteristics were inserted into our model in order to predict future patterns.

The OV is a little misleading. The colon in the first sentence gives the reader the impression that the author is going to mention all three stages together within the same sentence. The second two stages are not clearly marked. The RV separates the OV's first sentence into two parts. In the RV, first the author announces that there are three stages. Then she talks about these three stages in three separate sentences, which begin with a number indicator. This also makes the paragraph visually easier to follow.

The only advantage of a long paragraph is for the writer, not for the reader. It enables writers to save time because they avoid having to think about where they could break the paragraph up to aid reader comprehension. But breaking up long paragraphs is extremely important.

Firstly, long blocks of text are visually unappealing for readers, and tiring for their eyes. They fail to meet the basic rule of readability – make things as easy as possible for your reader. Evidence of this can be found in newspapers. If you look at newspapers from 100 years ago, they were basically big blocks of text that took a great deal of effort to read. Today many online newspapers have one sentence per paragraph, with lots of white space between each paragraph.

Secondly, your points and the related logical sequence of these points will be much more clearly identifiable for the reader if they are in a separate paragraph.

Thirdly, you will find that you will write more clearly if you use shorter paragraphs. This is because it will force you to think about what the main point of your paragraph is and how to express this point in the simplest way. If you just have one long paragraph, the tendency is just to have one long flow of frequently disjointed thoughts. This tendency is known in English as 'rambling'.

Fourthly, having shorter paragraphs enables you (and your co-authors) to quickly identify if you need to add extra information, and allows you to do this without having to extend an already long paragraph. Likewise, it enables you to identify paragraphs that could be cut if you find you are short of space.

The maximum length of a paragraph in a well-written research paper is about 15 lines. But most paragraphs should be shorter. If you have already written more than 8–12 lines or 4–6 sentences, then you may need to re-read what you have written and think about where you could start a new paragraph.

When you begin to talk about something that is even only slightly distinct from what you have mentioned in the previous 4–6 sentences, then this is a good opportunity to begin a new paragraph. For example, when you have been talking about how another author has approached the problem of X, and you then want to make a comparison with your own approach. The topic (i.e. X) is the same, but the focus is different. Likewise, if you have been comparing X and Y, and you have spent a few sentences exclusively on X, then when you start on Y you can use a new paragraph.

The table below shows the typical phrases used to connect one sentence to the next in order to create a logical progression of thought. These typical phrases also act as markers to indicate that you could begin a new paragraph.

TYPICAL PHRASES	FUNCTION OF THE PHRASE
In order to do this / To this end / With this mind	To state the purpose of something. For instance, you outline a requirement, and then you begin to say how you could meet this requirement
Then / Following this / Afterwards	To indicate a temporal relationship
For example, An example of this is In fact, Unlike Nevertheless,	To give an example or supporting/negating evidence. By 'example' I don't mean just a list of items, but a complete example or evidence that supports or negates what you have just been saying and that requires several sentences to explain
In addition / Another way to do / An additional feature of	To add additional points. For instance, if you are focusing just on one thing (e.g. X) and you talk about X's attributes
On the other hand However In contrast	To qualify what you have just said: i.e. to indicate an exception or the two sides of an argument
Due to / Since / Although	To give reasons for something
Thus / Therefore / Consequently / Because of this	To indicate a consequence
This means that / This highlights that / These considerations imply that / In conclusion / In sum	To announce and give a mini conclusion about what you have said in the previous sentences
Figure 1 shows / As can be seen in Table 2	To talk about figures, tables etc.
Firstly, secondly, finally	To introduce elements in a list
As far as X is concerned, / In relation to X, In the case of / With regard to / As noted earlier	To introduce a new element; to recall something mentioned earlier
It is worth noting that / Interestingly	To add some additional information or make some comment, not necessarily directly about something you have mentioned before but as an aside.

In all the examples in the table, I am talking about cases where you need at least three sentences (or two quite long ones) to achieve the function desired. For example, when you use *firstly*, *secondly* etc., you only need to begin a new paragraph if the sentence that begins *firstly* is then followed by another two or more sentences. If you only need one sentence for each item, then you don't need to begin a new paragraph.

There is no minimum length to a paragraph. A paragraph can occasionally be just one sentence. However, a series of paragraphs containing only one or two short sentences would be a little strange.

Where you begin a new paragraph will also depend on which section you are writing. In the review of the literature, you may want to begin a new paragraph when (i) you begin to talk about a different phase in the logical build up of research in your field, or (ii) you start talking about another author. In the Methods, it may help the reader to identify the various components or understand the various steps, if these components or steps are in separate (probably quite short) paragraphs.

Performing lexical and grammatical exercises.

- 1. Breast cancer among premenopausal women also showed variation **according to / in accordance with / in agreement with** the history of the patients.
- 2. Dataset characteristics of each problem were measured **according to / depending on / following** Smith et al. [4] and [15].
- 3. **Depending on / Following / In agreement** with the status of the couple, various solutions are possible:
- 4. **According to / In accordance with / Following** this method, the Bernoulli and hydrostatic equations can be combined to give...
- 5. For all three proteins we obtained polypeptide chains with molecular weights **in agreement** with / in compliance with / in accordance with the values from the literature.
- 6. The focus can be on the insertion or deletion of each video shot, **depending on / in compliance with / in agreement with** user preference.
- 7. The objective of the present study was to estimate 10 year probabilities of osteoporotic fractures in men and women **according to / in compliance with / in agreement with** age and bone mineral density.
- 8. Our results were **according to / in compliance with / in agreement with** the literature.
- 9. They were used **according to / depending on / in agreement with** the manufacturer's operating manual.
- 10. To date, all the tests have been carried out according to / in compliance with / in agreement with EU regulations.
- 1. In the first five chapters, the book covers **as / how / like** to search literature databases, **as / how / like** to interpret critically and appraise reports...
- 2. The second set has properties as / how / like those of the first set, with the difference that...
- 3. **As / How / Like** can be seen in the table, the values are considerably lower this time.
- 4. **As / How / Like** a prototype it worked well, but not in its final version.
- 5. It behaves as / how / like it should do.
- 6. It behaves as / how / like the other one.
- 7. It can be used **as / how / like** an alternative.

- 8. We used a piece of wood **as / how / like** a lever.
- 1. We studied **both** / **either** / **neither** English and Spanish. So we don't have any problems translating to and from these two languages.
- 2. You can study **both / either / neither** English or Spanish, i.e. you only have the option to study one of them.
- 3. You cannot study **both / either / neither** Russian and Korean, just one of the two.
- 4. You cannot study **both / either / neither** Russian or Korean, you can only study Chinese.
- 5. This is true **both for / for both** the students (there are 30 in the class) and the professors.
- 6. This is true **both for / for both** the students (i.e. Adrian and Anna) and the professors.
- 7. We had fun **both in / in both** the parks (i.e. Green Park and Hyde Park) we visited and also the museums.
- 8. We had fun **both in / in both** the parks (we lost count of how many we went to) and the museums.
- 9. This software will work with **both / either / neither** MAC or Windows.
- 10. This software will **both / either / neither** work with MAC nor with Windows, only on UNIX systems.

Insert the words below into the spaces.

addresses, aim, aimed at, aims to, o	continuation, feasibility	y study, framework,	propose,
scope, targeted, this end, undertoo	k		

Match the phrases (1–25) with functions (A–D)

- (A) Establishing why your topic (X) is important.
- (B) Outlining the past-present history of the study of X (no direct references to the literature).
- (C) Outlining the possible future of X.
- (D) Indicating the gap in knowledge and possible limitations.
- 1. A neglected area in the fi eld of analytical chemistry is...
- 2. Although this approach is interesting, it fails to take into account three critical factors.
- 3. By 2025, computers will have become redundant.
- 4. Concerns have arisen which call into question the validity of...
- 5. Despite this interest, no one to the best of our knowledge has studied...
- 6. Few researchers have addressed the issue of...
- 7. GISs have many applications in the field of...
- 8. However, there has been little discussion on...
- 9. In the next few years Nigeria is likely to have become...
- 10. It is not yet known whether these problems will be solved in the near future.
- 11. It is well known that psychologists tend to...
- 12. Moreover, other approaches have failed to provide...
- 13. Most studies have only focused on China to the detriment of India.

- 14. Psychometric tests are a critical part of the job interview process.
- 15. Recent developments regarding the future of the Internet have led to...
- 16. Roses are among the most well-known flowers on the planet.
- 17. Since 2012 there has been a rapid in the use of nanotechnologies.
- 18. The first studies in child psychology saw children as...
- 19. The Indonesian economy has received much attention in the past decade due to...
- 20. The last two years have witnessed a huge growth in the number of studies on this topic.
- 21. The main characteristics of bilinguals are: 161
- 22. The next decade is likely to see a considerable rise in unemployment.
- 23. There is little or no general agreement on...
- 24. There is still considerable controversy surrounding...
- 25. Traditionally, the focus on bilingualism has always been...

In each sentence delete the one word / phrase that is not appropriate / grammatical.

- 1. This paper **outlines / proposes / describes / discovers / presents** a new approach to...
- 2. This paper validates / examines / seeks to address / focuses on / discusses / investigates how to solve...
- 3. This paper is **an overview of / a review of / a report on / a preliminary attempt** how bilinguals separate the two languages while talking.
- 4. The aim of our work is to **further / extend / widen / broaden / amplify** current knowledge of...
- 5. This paper takes a new look at / re-examines / revisits / informs / sheds new light on how politicians use their power,
- 6. In the literature, 'psychotic' usually **refers / often refers / is usually referred** to a patient who...
- 7. Vitous [2015] has **provided / put forward / put down / proposed** a new definition of X, in which...
- 8. In the literature there lacks of a general definition of X / a general definition of X is lacking / there is no clear definition of X.
- 9. In their seminal / groundbreaking / cutting edge / state-of-the-art paper of 2001, Peters and Jones... 10. Experiments on X were conducted / carried on / carried out / performed on X in 2009 by a group of researchers from...
- 11. More recent evidence [Obama, 2013] shows / suggests / investigates / highlights / reveals / proposes that.
- 12. He claims / argues / criticizes / maintains / suggests / points out / underlines that...
- 13. Kamos's [23] assumptions seem to be **sensitive / realistic / well-founded / well-grounded / plausible / reasonable / acceptable.**
- 14. Many experts contend, **however / instead / on the one hand**, that this evidence is not conclusive.
- 15. This has led authors **as / such as / for example / for instance** Mithran [32], Yasmin [34] and Hai [35] to investigate...

Module 2 Basics of Academic writing

Features of academic writing (academic style, critical writing, referencing, developing paragraphs, writing plans). Research planning. Choosing an appropriate journal to publish a research paper. Analysis in research papers. Choosing a paper as a model. The correct order to write the various sections.

Read as many papers as you can from your chosen journal. This should help you to gain a clearer picture of what the editors of the journal are looking for to enable them to keep their readership levels high. Below are some of the typical things that editors hope to find in manuscripts.

TYPE OF PAPER	Original research, or a systematic review, or a position paper etc. (for more on the various types of paper consult Google Scholar or Wikipedia)
SUBJECT	Hot topic (contemporary issues), original and innovative; or controversial; or classic
AIM	Clarity of purpose, i.e. the research objectives are clear
RESEARCH	Well conducted, methodology clear, ethical, reproducible, no bias, limitations admitted
RESULTS	In line with research objective; entirely new or confirmation of other results already published in the same journal; not too broad as to be meaningless; can be generalized outside your very specific field
LENGTH OF PAPER	Short or long
STYLE	Personal (we, I), or impersonal (exclusively passive form), or mix (personal and impersonal)

Sometimes journals have themed or special issues on specific topics. These special issues are announced many months in advance of publication. Keep a look out for an issue that covers your specific area - it may be the perfect opportunity for you.

Choose one paper that is close to your topic, that is written by a native English speaker, and that you enjoyed reading. Use this paper as a model into which you can 'paste' your own research.

Notice how your model paper is structured:

- how does the author begin?
- · what points does s/he make in each section?
- how does s/he link paragraphs together?
- how does s/he connect the Results with the Discussion?
- how does s/he present the Conclusions?

There is no standard order in which you should write the various sections of your paper. You should choose the order that suits you best. This may involve writing several sections simultaneously.

Many authors start with the Methods, which is often the easiest section to write because this is the part that will usually be clearest in your mind. Beginning with the Methods will also give you the confidence and impetus you need to move on to the other sections of the paper.

In reality, it is best to start with the Abstract as this will help you to focus / orient your ideas on what are the key aspects of your research. In any case, if you are going to present your work at a conference, the organizers will ask you to submit an abstract before you write the related paper - you can still change the Abstract when you have finished writing the actual paper.

You might find it useful to look at the scientific study protocol that you wrote when you outlined the aims of your research at the beginning of your PhD or before you began your current project. Here you should have written out your goals very clearly, and this will help you to write your Abstract.

The hardest part for most authors is the Discussion where you have to interpret your results and compare them with other authors' results. While you are writing the Discussion, you may find it useful to draft the Introduction, as some of the authors you mention will appear both in the Introduction and the Discussion.

A typical order for writing the various sections is thus:

Abstract (very rough draft)

Methods

Results

Discussion

Introduction

Conclusions

Abstract (final version)

It is a good idea to write the Results and Discussion before the Introduction. This is because you will only truly understand the significance of what you have done after you have written these two sections. Laying the background foundations on which you can highlight the significance of your research is a major part of the Introduction.

Academic vocabulary. Vocabulary and academic style. Noun phrases. Nouns referring to ideas and phenomena, ways of thinking, processes and activities. Verbs for structuring academic assignments. Adjectives and typical combinations with nouns in academic texts.

- The packaging of products affects / effects / influences whether we will buy the product or not.
- Many teenage girls are affected / conditioned / interested by photos of skinny models, to the extent that they may become obsessed with losing weight.
- Whether teachers have previous experience or training will inevitably affect / condition / influence the way they teach.
- The choice of what to study at university is strongly conditioned / influenced / interested by the possibilities of a career.
- We found that the general public was only marginally affected / conditioned / interested by the government's campaign to encourage people to eat more healthily.
- It was found that religion can, under certain circumstances, totally affect / condition / influence the way believers behave.
- The way we define X does not affect / effect / influence the way X is perceived.
- 8. Does the job we do affect / condition / effect / influence the chances of us taking drugs?
- It is believed by some that correction may have a detrimental effect / influence a change on a student's confidence and may even affect / condition / influence their behavior during lessons.
- 10. The method chosen was found to affect / condition / interest the performance to the extent that choosing the wrong method inevitably gave catastrophic results. This finding affected / conditioned / interested the researchers, who then went on to repeat the experiment in Japan and Korea, with very different results.

- This may be desirable in the long term to allow / let / mean a greater degree of control over the...
- The paper shows the results of an approach that allows us to extrapolate the data / permits to extrapolate the data / means the data can be extrapolated more easily than with other methods.
- Increased connectivity enables / lets / permits new ways of conducting business, allowing / enabling / permitting companies to trade...
- We also allow / permit / let users the flexibility of editing incoming and sent messages.
- These governments do not enable / let / permit immigrants to have citizenship.
- The formulation of this new theory allows to / means we can / permits to obtain a more general expression of the overall transfer function.
- This kind of behavior is not allowed / enabled / permitted.
- 8. Her parents allowed / let / permitted her do anything she wanted.
- The data were analyzed / elaborated / processed using StAT 2.0.
- Unfortunately, the authors fail to analyze / elaborate / process on the method they used.
- Medical or cause-of-death information was analyzed / elaborated / processed separately.
- The food had evidently been analyzed / elaborated / processed before
 or during the outbreak of the disease.
- They have analyzed / elaborated / processed an experimental method of investigating emotion.

- The possibility that this might happen was foreseen / predicted by Sterling [2] and also by...
- On the basis of these intelligence tests, we must consider what new insights we would expect / predict to find.
- We expect / forecast that, as a result of this new approach, PTs will become increasingly popular.
- We did not anticipate / predict finding a solution, so we were surprised when...
- In their first study, they forecast / foresaw an increase in the elderly population of 12.6 million between 2013 and 2023.
- For the moment, urban planners do not anticipate / forecast large population increases in the region.
- 7. No one **expected / foresaw** this happening it took everyone by surprise.
- 8. The research findings reveal that the overwhelming majority of firms participating in the study did not **foresee / forecast** the economic crisis.
- The congress has been anticipated / brought forward from July to June.
- 10. If in the early 1980s anyone had anticipated / predicted that within a few years the Internet would have had more impact than the invention of the wheel, they would have been ridiculed.
- Forecasting / Foreseeing the weather in the long-term is a highly frustrating and ultimately unreliable activity.
 - We do not argue / claim / pretend to provide a complete solution to this problem.
 - There is no point arguing / claiming / pretending that these problems are likely to disappear in the near future, something needs to be done now.
 - A child has no difficulty in arguing / claiming / pretending that a banana is a telephone.
 - 4. They argue / claim / pretend that we do not need a government, but that we should be self-governing. However, this line of thinking does not...
 - Kasamir refuses to romanticize the freedom fighter as a heroic rebel, arguing / claiming / pretending instead that freedom fighters themselves are fulfilling their natural duty to liberate their country from an oppressive regime.
 - The children argued / claimed / pretended that they spend many hours a day arguing / claiming / pretending with their parents.

- We then estimated the unemployment rate that would have arisen / give rise to / raised / risen by 15% or more if those measures had not been introduced.
- However, we did not include these samples. In fact, including them would have arisen / give rise to / raised / risen an overrepresentation of...
- In these cases the government should have arisen / give rise to / raised / risen taxes rather than...
- Inflation could have arisen / give rise to / raised / risen to 12% if the Central Bank had not intervened.
- Inflation has arisen / give rise to / raised / risen. Social problems have arisen / give rise to / raised / risen due to the consequent high levels of unemployment, which has arisen / give rise to / raised / risen violence across the country.
- 6. The proofreaders of the document have arisen / give rise to / raised / risen several issues with regard to the use of English. These issues seem to have arisen / give rise to / raised / risen from the fact that there are a considerable number of grammatical errors. In fact the number of such complaints about our documents has arisen / give rise to / raised / risen dramatically.

- These fertilizers are designed to ascertain / check / control / verify the growth of grass weeds.
- This allows us to provide a cross check of previous results on how well parents are able to ascertain / check / control / verify their children.
- Formal verification is another way to ascertain / check / control / verify the validity of protocols.
- 4. The case notes of all patients recorded as having this pathology were reviewed to ascertain / check / control / verify the diagnosis and to ascertain / check / control / verify the nature of death.
- We thus needed to ascertain / check / control / verify whether it was indeed Ca++ that was responsible for this effect.
- Someone's exact movements can be ascertained / checked / controlled / verified if they are carrying a GPS device.
- This is becoming an increasingly vital problem in situations such as ascertaining / checking / controlling / verifying the identity of criminals.
- All patients were screened by telephone interview to ascertain / check / control / verify the possible diagnosis of high blood pressure.
- Readers are invited to examine the references given with this article to ascertain / check / control / verify the fact that our results our truly representative.
- Thousands of extra police officers were employed to ascertain / check / control / verify the crowds.

- Although language expertise has been assumed / hypothesized / supposed to be highest in bilingual children, it has never actually been proved.
- The problem is that although the students apparently study what they
 are assumed / hypothesized / supposed to study, the examination
 itself may not actually test what it is assumed / hypothesized /
 supposed to test.
- In this chapter it is assumed / hypothesized / supposed that the reader is familiar with...
- In the literature it has been assumed / hypothesized / supposed that abnormalities in the connections of white matter pathways may be a fundamental cause of...
- On this basis, it is assumed / hypothesized / supposed that students will only want to undertake a Ph.D. if they...
- 6. Students were informed that they were not assumed / hypothesized / supposed to use a dictionary during the exam, however many students nevertheless brought a dictionary with them as they had assumed / hypothesized / supposed that the invigilators would not be strict.
- In conclusion, in this paper it has been assumed / hypothesized / supposed that the more money we have, the more we will be unhappy.
- It has been assumed / hypothesized / supposed by Smith et al. that the rate at which we learn knowledge is proportional to the rate at which we...
- For this purpose let us assume / hypothesize / suppose that we have two systems, I and II, which we permit to interact from the time t 0 to t...
- We had assumed / hypothesized / supposed that patients would automatically wish to be treated. In reality...

- This therapy is complex and involves many steps. At each step, comprehensive quality assurance procedures are required to assure / ensure / insure the safe and accurate delivery of a prescribed dose.
- The cost of assuring / ensuring / insuring buildings in those parts of the country subject to earthquake can be up to 75% higher. In addition, to assure / ensure / insure, for example, a car, will also cost considerably more.
- To assure / ensure / guarantee the quality of teaching based on this
 concept of teaching, schools need to assure / ensure / insure that the
 system is open enough to allow for variations in student types.
- The government should assure / ensure / guarantee the protection of all its citizens against such threats.
- This continuous back up policy assures / ensures / guarantees that data will not be lost.
- We assure / ensure / guarantee you that you will receive a reply by the end of this week.
- I'm just writing to assure / ensure / insure you that we are working on the problem.
- 8. Please assure / ensure / guarantee that you are using the latest version.

WRITTEN	SAID	WRITTEN	SAID
CARDINALS AND ORDINALS			
101	a / one hundred and one	58,679	fifty eight thousand six hundred and seventy nir
213	two hundred and thirteen	2,130,362	two million, one hundred and thirty thousand,
1,123	one thousand, one hundred and twenty three		three hundred and sixty two
13th	thirteenth	31st	thirty first
CALENDAR DATES			
10.03.20	the tenth of March	1996	nineteen ninety six
two thousand and twenty (GB)			nineteen hundred and ninety six
GB: day /	or March (the) tenth	1701	seventeen oh one
month / year	two thousand and twenty (GB)		seventeen hundred and one.
US: month / day / year	October third two thousand twenty (US)	2010s	twenty tens
FRACTIONS, DECIMALS, PERCENTAGES			
1/4	a quarter / one quarter	0.25	(zero) point two five
1/2	a half / one half	0.056	(zero) point zero five six
3/4	three quarters	37.9	thirty seven point nine
10%	ten per cent	100%	one hundred percent

WRITTEN	SAID	WRITTEN	SAID	
SQUARES, CUBES ETC.				
4 m ²	four meters squared, four square meters	25	two to the power of five	
5 m³	five cubic meters, five meters cubed			
MONEY				
678	six hundred and seventy eight euros	\$450,617	four hundred fifty thousand six hundred seventeen dollars	
¥1.50	one yen fifty (cents)	\$1.90	a dollar ninety	
MEASUREMENTS				
1 m 70	one meter seventy	3.5 kg	three point five kilos	
3 m×6 m	three meters by six			
100°	one hundred degrees	-100	minus ten degrees	
			ten degrees below zero	
PHONE NUMBERS				
0044 161 980 4166	zero zero four four one six one nine eight zero four one double six	ext. 219	extension two one nine	
	or oh oh four four etc.			

Module 3 Specific grammar of Academic writing

Learning the active vocabulary of the module.

Theory of translation, punctuation for academic writing.

Performing lexical and grammatical exercises.

Translation of scientific articles from a foreign language into Russian.

Structure of a paper. Grammar used in Introduction, Literature review, Methods, Conclusion, Discussion Sections. Generating titles. Problems of string of nouns in titles. Making titles concise. Genres of academic writing. Learning outcomes. Basic structures. Types of academic writing.

English has a strict order in which words can appear in a sentence. S1 shows an example of this order.

S1. The researchers sent their manuscript to the journal.

This order is rarely altered. It is:

- 1. subject (the researchers)
- 2. verb (sent)
- 3. direct object (their manuscript)
- 4. indirect object (the journal)

The key is to keep the subject, verb, direct object and indirect object as close to each other as possible. This is illustrated in S2, which maintains the exact order of S1.

- S2. Last week the researchers sent their manuscript to the journal for the second time.
- S3. *The researchers last week sent for the second time to the journal their manuscript.

S3 is incorrect English. The position of *last week* and *for the second time* is wrong, and the indirect object comes before the direct object.

Word combinations in academic texts. At academic institutions. Vocabulary: applications forms, academic courses, online learning. Facts, evidence, data, numbers, graphs and diagrams, time, cause and effect.

Module 4 Academic style

Learning the active vocabulary of the module.

Specific analysis. Structured research articles abstracts. Tips for writing research article abstracts. Conference abstracts. Writing introductions, overall shape of an introduction. Tips for writing different kinds of introductions (introduction to course paper, book reviews, journal article, book chapters, research reports, proposals).

Performing lexical and grammatical exercises.

- 1. It was found that X = 2, whereas / on the contrary Kamatchi [2011] found that X = 1.
- 2. Despite the fact / Although that Li and Mithran [2014] found that X = 2, we found that X = 3.
- 3. In contrast to / On the contrary earlier findings [Castenas, 2009], we found that x does not equal y.
- 4. This study has not confirmed previous research on X. Nevertheless / despite, it serves to...
- 5. Notwithstanding the fact that / Despite these results differ from earlier studies (Cossu, 2001; Triana, 2002), they are consistent with those of...
- 6. Georgiev is correct to claim that x = y. Nevertheless / however, his calculation only referred to a limited case.
- 7. The current study does not support previous research in this area. In fact, contrary to / unlike what was previously thought, we found that...
- 8. Despite / Nevertheless the lack of agreement, we believe our findings compare well with...
- 9. Although / Despite there was some inconsistency...
- 10. This does not justify non-invention. However / on the contrary it is another reason for increased intervention.
- (1) Since / When writing first began, there was little or no punctuation. Punctuation was introduced many hundreds of years later to help the reader. Punctuation tells us (2) both / when we can pause and helps us to see connections between the elements in the sentence. Readability (3) however / thus has a visual element to it as well. This visual element is (4) also / besides affected by how we read. Today, much reading is done directly from a screen, (5) other than / rather than from a hard copy. (6) Because / Why we generally want information fast, particularly

(7) since / when searching on the Internet, we tend to scan. Scanning means not reading each

individual word (8) but / yet jumping forwards three or more words (or sentences) at a time. The distance that we jump (in terms of the number of words or sentences) depends on the value that those words are adding in our search for information. (9) If / Yet they add no value we tend to jump further. (10) If / When we continue to get no value, instead of scanning left to right along a line of text, we scroll from top to bottom. We (11) thus / still read vertically (12) instead of / rather than horizontally until we find what we want.

This has huge implications for you as a writer. (13) If / When you want your reader to read your paper in depth, (14) then / thus you cannot afford to fill your sentences with redundancy. (15) If / When you write a series of very long sentences, you will encourage your reader to scan and scroll. This means that they may never see / read the key information contained within all the redundancy.

Writing a readable text entails being able to understand the nature of communication: thinking about your audience and the impact of how you organize your thoughts and words. (16) If / Unless you write a readable text, you will find personal satisfaction not in how erudite and elegant your phrases sound, (17) but / however in the ease with which you allow your readers to absorb your ideas. Remember that no one will be under any obligation to read your paper. (18) If / When readers don't find it useful, (19) either / or interesting, (20) both / or at least pleasurable, (21) and / however they have the feeling that it was not written with them in mind, they will simply stop reading. Your findings will (22) only / then be lost in oblivion.

- 1. The aim of this study was to assess the effects of sending children away to school at the age of eight (or earlier) and its impact on their adult life (particularly after the age of 50) and thus to reach some definitive conclusions as to whether boarding schools (i.e. those schools where children study and sleep) actually fulfill the important educational and social roles that they claim to have.
- 2. People who have attended boarding schools often have no realization of the effect that leaving their parents at a very young age has had on their emotional development because the signs of this effect generally do not become sufficiently apparent until middle age and are often due to a kind of subconscious repression which is why such subjects do not make the connection between their current levels of over-emotiveness and their childhood lack of parental affection.
- 3. Questionnaires were sent to 5000 ex-boarding school adults with an age ranging between 40 and 60 all of whom had previously given permission to access their medical records and all of whom were or had been married, with the purpose of setting up a database of subjects' responses regarding their school time experiences and their experiences now as adults.
- 4. A substantial increase in sensitivity to emotional situations characterizes the first stages of adult life leading to a possible uncontrolled release of anger or apparently unexplained feelings of anxiousness that appear to come from nowhere and may last for several days thus making life quite difficult not only for the subjects themselves but also for those living around them.
- 5. Treatments for these subjects are often very expensive and technically difficult, and their effectiveness very much depends on the willingness of the subject to undergo therapy and on the degree of stress, emotional disturbance and marital discord that they had experienced.

The following extract is from an Introduction. It is one long paragraph and contains three very long sentences, averaging over 80 words each. Divide the paragraph into three shorter paragraphs, and break up each sentence into shorter more manageable sentences. The aim of this paper is to confirm that how we speak and write generally reflects the way we think and that this is true not only at a personal but also at a national level, and to this end two European languages were analyzed, English and French, to verify whether the structure of the language is reflected in the lifestyle of the respective nations. English is now the world's international language and is studied by more than a billion people in various parts of the world thus giving rise to an industry of English language textbooks and teachers, which explains why

in so many schools and universities in countries where English is not the mother tongue, it is taught as the first foreign language in preference to, for example, Spanish or Chinese, which are two languages that have more native speakers than English. As a preliminary study, in an attempt to establish a relationship between document length and level of bureaucracy, we analyzed the length of 50 European Union documents, written in seven of the official languages of the EU, to con fi rm whether documents, such as reports regarding legislative and administrative issues, vary substantially in length from one language to another, and whether this could be related, in some way, to the length of time typically needed to carry out daily administrative tasks in those countries (e.g. withdrawing money from a bank account, setting up bill payments with utility providers, understanding the clauses of an insurance contract). The results showed that...

Our system is based on four components: it has many data files (the weather, people, places, etc.); it has procedures which it tries to use to combine these files by working out how to respond to certain types or patterns of questions (this entails the user knowing what types of questions it can answer); it has a form to understand the questions posed in a natural language (so the user may need to know English) which it then translates into one of the types of questions it knows how to answer; finally, it has a very powerful display module, which it uses to show the answers, using, graphs, maps, histograms etc.

Using automatic translation software (e.g. Google Translate, Babelfish, and Systran) can considerably ease the work of researchers when they need to translate documents thus saving them money (for example the fee they might have otherwise had to pay to a professional translator) and increasing the amount of time they have to spend in the laboratory rather than at the PC.

Development of academic writing skills in accordance with research areas of master students. Writing CVs. Formal letters and e-mails. Structuring the content of an e-mail. Planning an e-mail. Formal greetings. Regrets and replies. Academic correspondence styles. Statements of purpose, personal statements.

Watch the video

https://www.ted.com/talks/guy_katz_how_to_write_an_email_that_will_always_b e answered and answer the questions.

- 1. What does Guy compare an e-mail with? Why?
- 2. How many letters does each person who works in an average office receive a day according to the statistics?
- 3. What was the worst e-mail he had ever received?
- 4. What kind of e-mails cannot be replaced by any other means of communication?
- 5. What are the five ingredients for a great e-mail?
- 6. How can we add emotionally to a formal e-mail?
- 7. What does it mean if a teenager finishes a text message with a full stop?
- 8. What increases the chances to get an answer?
- 9. What are the two things that e-mails have in common?
- 10. What should be written under the PS line? Why?

Module 5 Professional communication

Aspects of spoken English and professional communication. Interviewing and advising. Negotiation. Chairing a formal meeting. Telephoning. Finding the voice in the academic community (communicating with advisors and committee members, co-authors, requests, reminders, writing apologies, grant applications, letters, fellowship application).

Preparing presentations in English. Writing and editing the text of the slides. Outline and transitions. Writing a speech. Methodology and results discussion. Conclusions. Questions and answers. Useful phrases. Pronunciation and intonation.

Translation theory: what to avoid. Avoiding Ambiguity and Vagueness. Which/who vs. that. Which/that and who. Uncountable nouns. Pronouns. Referring backwards: the former, the latter. False friends. Terms, definitions, references. definitions. Introduce mathematical clichés.

Module 6 Preparing a research article

Learning the active vocabulary of the module.

Academic vocabulary: talking about ideas. Reporting verbs and nouns. Analysis of results. Points of view. Degrees of certainty. Presenting an argument. Describing research methods. Classifying. Making connections. Comparing and contrasting. Evaluation and emphasis. Summary and conclusion.

Useful phrases in Introduction, Literature review, Methods, Conclusion, Discussion.

Writing a research paper. Literature review

- 1. What are the seminal works on my topic? Do I need to mention these?
- 2. What progress has been made since these seminal works?
- 3. What are the most relevant recent works? What is the best order to mention these works?
- 4. What are the achievements and limitations of these recent works?
- 5. What gap do these limitations reveal?
- 6. How does my work intend to fill this gap?

Persistence has most often been studied in terms of cultural differences. Blinco (1992) found that Japanese elementary school children showed greater task persistence than their American counterparts. School type and gender were not factors in moderating task persistence. This left culture as the remaining variable.

Heine et al. (2001) furthered this idea by testing older American and Japanese subjects on responses after success or failure on task persistence. Japanese subjects were once again found to persist longer (in post-failure conditions), and this was speculated to be because they were more likely to view themselves as the cause of the problem. If they were the cause of the problem, they could also solve the problem themselves; although, this could only be accomplished through work and persistence. Americans were more likely to believe that outside factors were the cause of failure.

These cultural studies hinted that task persistence may be predictable based on attribution style. A later experiment showed that attribution style and perfectionism level can be correlated with final grades in college-level classes (Blankstein & Winkworth, 2004).

- 1. introduction to topic
- 2. support from the literature
- 3. mini summary
- 4. introduction to next topic. And so on.

style 1 Blinco [1992] found that Japanese elementary school children showed ... style 2 In [5] Blinco found that Japanese elementary school children showed ...

style 3 A study of the level of persistence in school children is presented by Blinco [1992]. style 4 A greater level of persistence has been noticed in Japan [5].

ORIGINAL VERSION (OV) REVISED VERSION (RV) 1 Long sentences are known to be Long sentences are a characteristic of poor characteristic of poor readability [Ref]. readability [Ref]. 2 *In the literature* the use of long sentences Long sentences are not exclusive to English has also been reported in languages other than English [Ref]. 3 The use of long sentences has been Long sentences were used during the Roman ascertained in various regions of Europe period in various regions of Europe [Ref]. during the Roman period [Ref]. 4 The concept of author-centeredness has Author-centeredness may play a role in the been suggested as playing a role in the construction of long sentences [Ref]. construction of long sentences [Ref]. 5 Several authors have proposed that in In scientific writing the occurrence of a scientific writing the occurrence of a high high abundance of long sentences may be abundance of long sentences is correlated correlated to ... [Ref]. to ... [Ref].

As far as we know, there are no studies on ...

To [the best of] our knowledge, the literature has not discussed ...

We believe that this is the first time that principal agent theory has been applied to ...

Generally speaking patients' perceptions are seldom considered.

Results often appear to conflict with each other ...

So far X has never been applied to Y.

Moreover, no attention has been paid to ...

These studies have only dealt with the situation in X, whereas our study focuses on the situation in Y.

	EXAMPLES
1	Wallwork [2012] stated x = y.
	Huang [2013] agrees with this statement, but Xanadu [2014] does not.
2	In [6] Wallwork stated that $x=y$. Then in [9] he added that $x+1=y+1$.
3	A proposal for a conference on this topic was put forward by Tang [2014].
3	This is not the first time that such a proposal has been put forward [Himmler, 2012; Goldberg, 2013].
	This is not the first time such a proposal has been put forward [6, 27, 33].
4	This proposal was first put forward in [6].
	In [6] a proposal for a conference on this topic was put forward.

	YES	AMBIGUOUS OR WRONG
1	In [6] Wallwork put forward a proposal for the scientific community to allow personal forms. = another author In [6] we put forward a proposal for the scientific community to allow personal forms. = the author of the current paper	In [6] the author put forward a proposal for the scientific community to allow personal forms.
2	In a previous paper [Gomez, 2], we found that x = y.	In [Gomez, 2], it was found that x = y.
3	In [6] Wallwork stated that all journals should allow the use of personal forms. Two years later he added that the ISO should set some standards regarding the style of bibliographies [9].	In [6] Wallwork stated that all journals should allow the use of personal forms. Two years later he added that the ISO should set some standards for scientific writing [Wallwork, 2014].

SUGGESTED USAGE	EXAMPLES
one author: name + comma + year	Wallwork, 2015
two authors: name1 'and' name2 + year	Wallwork and Southern, 2016
three authors: name1 + comma + name2 'and' name3 + year (Note: writing the names of three authors is quite unusual)	Wallwork, Brogdon and Southern, 2016
three or more authors: name1 + et al.	Wallwork et al., 2016
two or more references: ref1 + semicolon + ref2 + semicolon etc.	Wallwork et al., 2016; Sanchez, 2017; Poplova, Huang and Sun, 2018
several works by same author: name + comma + year1 + comma + year2 etc.	Wallwork, 2012, 2014, 2016

SUGGESTED USAGE	EXAMPLES	
when the author is the subject of the verb:	Wallwork [2012] suggests that	
name + year in parentheses. Alternatively: name + reference number in parentheses	Wallwork [6] suggests that	
when the author is not the subject of the verb: both name and year in parentheses	It has been suggested that one plus two is equal to four (Moron, 2011).	

	YES	ALSO POSSIBLE
1	Wallwork et al [2016] put forward a proposal for the scientific community to allow personal forms.	Wallwork and co-workers [2016] put forward
2	Wallwork et al [2016] suggested that	Wallwork et al [2016] suggested that
		Wallwork et al. [2016] suggested that

	YES	NOT RECOMMENDED (1-4), NO (5)
1	See Figure 1 and Table 2.	See figure 1 and table 2.
2	See Fig. 1a and Figs. 2a and 2b.	See Fig. 2a and "b.
3	Figure 2 below shows the initial settings.	The following figure (Figure 2) gives a schematic overview of the initial settings.
3	Figure 3 shows the architecture.	The snapshot depicted in Figure 3 shows a view of the architecture.
3	For details, see [Kyun, 2013].	For further details on this topic, the reader is kindly invited to refer to [Kyun, 2013].
4	Figure 2 below shows the initial settings.	The initial settings are shown in Figure 2 below.
		In Figure 2 the initial settings are shown.
5	As can be seen in the figure below	As it can be seen in the figure below

Figure 1. The main characteristics of the shock absorbers.

	YES	NOT RECOMMENDED (1), WRONG (2-5)	
1	As mentioned in Section 2 , this procedure is	As mentioned above , this procedure is	
1	This procedure is extremely complex and is described in Section 4 .	This procedure is extremely complex and is described later.	
2	The function mentioned above is	The function above mentioned is	
	The above-mentioned function is		
3	This feature is known as an 'automatic rendering and masking agent' hereafter ARM agent.	This feature is known as an 'automatic rendering and masking agent' in the following ARM agent.	
4	The following versions can be used:	The versions that can be used are the following:	
	The versions that can be used are as follows:		

Supporting the publication process. Manuscript submission, responding to reviewers and editors, writing acknowledgments.