

18 Problems of Style: Recognising and Correcting Them

Scientific and technical writing is about clarity and conciseness. This chapter doesn't try to give comprehensive guidelines on stylistic elegance. Instead, using simple terms and avoiding classical grammar as far as possible, it deals with some of the straightforward, frequently asked questions about style. It covers the following:

- **Punctuation**
 - The apostrophe
 - Commas, semicolons and colons
 - Exclamation marks: don't use them
 - Rhetorical questions: don't use them
 - **Words**
 - Spelling: check it
 - Making plurals/irregular plurals
 - Noun trains
 - Pairs of words that are often mixed up
 - Jargon phrases to avoid
 - Use small words, not pompous ones
 - The split infinitive
 - Sentence length
 - Paragraph length
 - **Verbs and vivid language**
 - The voice: active/passive/distorted passive
 - Lifeless verbs
 - Excessive use of nouns instead of verbs
 - Subject/verb agreement
 - Using the correct tense/form of the verb
 - **Incomplete sentences: recognising and correcting them**
 - **When English is a foreign language**
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Punctuation

The apostrophe

There are two areas where an apostrophe is used:

- 1. **The possessive:** showing who or what something belongs to.
- 2. **Contractions:** where two words have been informally squashed into one.

The possessive

The apostrophe shows who/what owns something.

Use **'s** if there is only one:

the cell's chromosomes (the chromosomes in one cell)

Use **s'** if there are more than one:

the cells' chromosomes (the chromosomes in a number of cells)

BUT, there is no apostrophe in **yours** (e.g. the book is yours), **hers**, **ours**, **theirs** or in **its** (e.g. the cell and its chromosomes, *see also next section*).

Contractions: *Don't use them*

Note: This book uses contractions throughout, but it's not an example of formal writing.

The apostrophe is used in a contraction to show that two words have been informally pushed together. Because contractions are informal, they shouldn't be used in the types of writing covered in this book.

The main contractions that cause confusion are the following:

- 1. **it's**
- 2. **who's**
- 3. everything ending in ... **n't** (wouldn't, hadn't, etc.)

It's/Its

The mixing up of these two happens all the time, yet it's very easy to understand the difference.

It's is the contracted, colloquial way to write **it is** or, less often, **it has**. Therefore: **Never use *it's* in any formal writing. It's colloquial. It can *only* mean it is.**

<i>Wrong</i>	<i>Right</i>
Because of overuse, the land has lost it's nutrients.	Because of overuse, the land has lost its nutrients

Putting it Right: it's/its

- **Never** write **it's** in formal writing. **It's = it is.**

For anything other than informal letters or notes, you will need the **its** form – with no exceptions.

A good way to check:

Read it aloud to yourself, saying every **it's** as **it is**. Does **it is** make sense? If so, write it. If not, write **its**.

Whose/Who's

This case is very like *it's/its*. **Who's** is a colloquial form of **who is** or **who has**.

<i>Wrong</i>	<i>Right</i>
Mr. Smith, who's responsibility is the monitoring of the outfall, says that ...	Mr. Smith, whose responsibility is the monitoring of the outfall, says that ... (Does it mean <i>who is</i> ? No: so write <i>whose</i> .)
Mr. Smith, who's responsible for monitoring the outfall, says that ...	Mr. Smith, who is responsible for monitoring the outfall, says that ... (Does it mean <i>who is</i> ? Yes: so write <i>who is</i> .)

Putting it Right

- If you mean **who is** or **who has**, write it.
- All the other times, you'll need **whose**.

Everything ending in ...n't

Examples:

shouldn't, mustn't, wouldn't, didn't, can't, hadn't, etc.

In any formal writing, the words should be written out in full:

should not, must not, would not, did not, cannot, had not, etc.

<i>Examples of contractions. Incorrect in formal writing</i>	<i>Wrong</i>	<i>Right</i>
couldn't wouldn't wasn't weren't didn't shouldn't hadn't	The valve couldn't be opened. The young birds wouldn't feed. The stream wasn't polluted. The older birds weren't present. The water didn't contain PCBs. This procedure shouldn't have been followed. The company said it hadn't been informed.	could not would not was not were not did not should not had not

Putting It Right: Summary

Never use contractions in formal writing. Write them out in full. The following are particularly common:

- **it's** = it is
- **who's** = who is
- **words ending in ...n't** (don't, won't, can't, couldn't, shouldn't, etc. = do not, will not, cannot, could not, should not, etc.)

ALSO: plurals are not made by adding 's. See *Plurals*, page 213.

Commas, semicolons and colons

(For the use of **quotation marks** in referencing, see Chapter 15: *Referencing*, page 186.)

The following provides very brief guidelines to the main ways in which commas, semicolons and colons are used.

Using a comma

A comma indicates a pause. You can often tell where a comma should be by saying the words to yourself. Commas are generally used in the following places:

After each item in a series but generally not before the final and:

(Adjectives) The river is wide, turbulent and muddy.

(Nouns) The most common birds on the island are sparrows, chaffinches, thrushes and blackbirds.

(Phrases) The river mouth is wide, with large shingle banks, extensive sand dunes and a small island.

To delimit a sub-clause from the main clause in a sentence:

When the engine was run on petrol, the carbon dioxide emissions were higher, which was an indication of improved mixing.

Increasing agriculture will cause an increase in global warming, the reason being that ruminants and paddy fields produce methane.

After an introductory phrase or sub-clause:

Although farmers in this area have reduced their use of pesticides in recent years, there is still local concern about the issue.

By using better management practices, farmers have been able to reduce their use of pesticides.

To delimit material that is not essential to the meaning of the sentence:

The island, although windswept, has a large number of different bird species.

Using a semicolon

- ***Between two closely related independent clauses:***

(The statement on each side of a semicolon should be able to stand alone as a sentence.)

The spill caused the level of toxins in the river to rise; as a result, the entire fish population died.

- *Between items in a list when the items are punctuated by commas:*

Yesterday I ate muesli, bacon and eggs for breakfast; bread, cheese and pickles for lunch; and fish and chips for dinner.

Using a colon

To introduce a list or series:

1. *Before bullet points:*

The following topics will be discussed:

- climate change
- volcanic hazards
- violence against women
- poverty

2. *Where a list is all strung together, a colon precedes the listed points, and semicolons separate them:*

The following topics will be discussed: climate change; volcanic hazards; violence against women; and poverty.

Several features changed significantly during the sampling period: water temperatures decreased; ammonium levels increased to more than 150 ppm; dissolved oxygen fluctuated; and the pH rose at one stage to 8.3.

Exclamation marks: Don't use them

Breathless writing and exclamation marks are not appropriate in formal writing. Avoid phrasing such as the following:

The world has a problem with carbon dioxide, of that we can be sure!

There is now the possibility of restoring these sites back to their original (hopefully!) condition.

Rhetorical questions: Don't use them

These are questions asked to produce an effect rather than to gain information. They are usually not appropriate in a technical document. But they are frequently used by inexperienced writers and sound very clumsy.

Wrong: This study has shown that the nutrient level is low. What can be done about it? It can be remedied by ...

Corrected: This study has shown that the nutrient level is low. It can be remedied by ...

Words

Spelling: Check it

Never underestimate the effect that bad spelling has on the quality of a piece of writing. Some people don't notice when words are spelled incorrectly; others are

irritated because it interrupts the flow of the text. Many assessors fall into the second category.

Use the spellchecker on the word processor, and then proofread it

- **Run everything through a spellchecker as the very final stage before submission.** The critical word here is *final*. Many mistakes creep in when last-minute amendments are done and spellchecking is then omitted in the general haste.
- **Even after spellchecking, never assume that a spellchecked assignment is error-free. Proofread it yet again.** A spellchecker will pass words that you may not have intended – *it* instead of *is*, *an* instead of *on*, etc.

Example of spellchecked nonsense

Here is a constructed example of something that would be passed by a spellchecker but is nonsense. Each word has a maximum of only one mistyped letter.

His technique cam also by applies to the analyses or gold bills. He surface oh a gulf bell hat dimpled an is, ant whet is travels thorough aid, the flop around the bell it smother.

The intended version:

This technique can also be applied to the analysis of golf balls. The surface of a golf ball has dimples on it, and when it travels through air, the flow around the ball is smoother.

Commonly misspelt words in technical writing

<i>Wrong</i>	<i>Right</i>
accomodation	accommodation
callibrated	calibrated
comparitive	comparative
consistant	consistent
equillibrium	equilibrium
guage	gauge
heirarchy	hierarchy
intergrate	integrate
proceedure	procedure
recomend/recommend	recommend
rythm	rhythm
seperate	separate
speciman	specimen
theoritical	theoretical
verses	versus (as in describing a graph)
vise versa (and variations)	vice versa
yeild	yield

Plurals

- Never make a plural – more than one of something – by adding 's. Just add *s*. There are only two types of exceptions to this:
 - add -es if the word ends in -o or -sh or -ss (*potatoes* or *fishes* or *classes*)
 - add -ies if the word ends in -y (*ferries*).
- The plurals of abbreviations or dates don't have apostrophes.

<i>Wrong</i>	<i>Right</i>
Many river's	Many rivers
Many valve's	Many valves
Many potato's	Many potatoes
Many fish's	Many fishes
Many pizza's	Many pizzas
Many ferry's	Many ferries
Many class's	Many classes
PCB's	PCBs
The 1990s	The 1990s

Irregular plurals

The following words are commonly used in science and technological writing and have irregular plural forms:

Singular	Plural
alga	algae
analysis	analyses
antenna	antennae (biology) antennas (communications engineering)
appendix	appendices
axis	axes
bacterium	bacteria
criterion	criteria
genus	genera
hypothesis	hypotheses
larva	larvae
locus	loci
matrix	matrices
medium	media
nucleus	nuclei
ovum	ova
phenomenon	phenomena
quantum	quanta
radius	radii
species	species
stimulus	stimuli
stratum	strata
symposium	symposia
vertebra	vertebrae
vortex	vortices

Noun trains

These are strings of nouns that are each piled on top of another. They can be found in titles, as a result of an attempt to compress as much information into as few words as possible. The significant information is the part at the end. For example:

The Middleborough Point power station fan floor concrete slab

To rewrite, take the final part, bring it to the beginning, and it will readily sort itself out.

The concrete slab forming the fan floor of the Middleborough Point power station

The rewritten form will inevitably be longer, but it will be easier to read.

This example is an eight-part noun train. It's usually accepted that a three-part noun train is understandable; anything above three parts should be rewritten.

Pairs of words often mixed up

There are pairs of words or expressions that are often muddled. Some of the most common pairs are:

Absorb/adsorb
Affect/effect
Complement/compliment
Imminent/eminent
It is composed of/it comprises
Its/it's
Lead/led
Loose/lose
Passed/past
Principal/principle
Their/there
Whose/who's

Absorb/Adsorb

Absorb

- To take up by chemical or physical action
- The swallowing up or engulfing of something

Adsorb

The process of the adhering of atoms or molecules to exposed surfaces, usually of a solid. **It should be used only when you need this precise meaning.**

Affect/Effect

This is easy when you know how. Focusing on the commonest uses of the two words in most science and technological writing:

affect is a verb, **effect** is a noun (see Appendix 2, *The Parts of Speech and Verb Forms*, for guidelines on these terms).

To **affect** something is to influence it (*a verb*)

The pollution will **affect** the dissolved oxygen concentration.

The pollution has **affected** the dissolved oxygen concentration.

The **effect** of something is the result or consequence of it (*a noun*).

The pollution will have an **effect** on the dissolved oxygen concentration.

<i>Wrong</i>	<i>Right</i>
<p>Natural events such as heavy rain may effect the traffic flow.</p> <p>In some systems, the fish were unable to be eaten, therefore effecting the food chain.</p> <p>This report examines the affects of natural hazards on communities.</p>	<p>Natural events such as heavy rain may affect the traffic flow.</p> <p>In some systems, the fish were unable to be eaten, therefore <i>affecting</i> the food chain.</p> <p>This report examines the <i>effects</i> of natural hazards on communities.</p>

Putting It Right

- *Effect:*

Use *effect* or *effects* as nouns. This means:

a, an, the effect or the, some, several, a few, many, a couple of effects.

Wrong: This will effect the stream, this has effected the stream.

- *Affect:* Use *affects* as a verb.

Correct: This affects something, this will affect something, this has affected something.

Wrong: the affects of ...

- If it ends in *-ed*, you will almost certainly need **affected**, *not effected*.

Compliment and complimentary/complement and complementary

Compliments/complimentary – where you want to imply flattery.

He complimented the guest speaker on her presentation.

You will receive a complimentary ticket to the dinner.

Complements/complementary

1. The finishing touches to a thing, fitting together, completing
The formal garden complements the exterior of this superb house.
2. The scientific or mathematical meanings
complementary angles
complementary colour
complementary relationship
complementary function

Imminent/Eminent

Imminent: soon, impending

Their arrival is imminent.

Eminent: important, distinguished

She is an eminent scientist.

Composed/Comprises

There are two expressions that commonly get mixed up: **is composed of** and **comprises**.

Correct:

It is composed of three parts.

or

It comprises three parts.

Incorrect:

It is comprised of three parts.

<i>Wrong</i>	<i>Right</i>
The material used in dental fillings is an amalgam comprised of mercury and silver.	The material used in dental fillings is made of an amalgam comprising mercury and silver. <i>or</i> The material used in dental fillings is made of an amalgam composed of mercury and silver.

Putting It Right

Comprised, comprises or comprising can never be followed by *of*.

Lead/Led

This has become confused because *lead* is pronounced in two different ways:

- The element Lead (Pb)
- Will you lead the team?

This word doesn't follow the same system as *read*, which is what often confuses people.

The most common misuse is in the following:

<i>Wrong</i>	<i>Right</i>
This lead to pollution of the stream. This has lead to more interest being shown in the hot air engine.	This led to pollution of the stream. This has led to more interest being shown in the hot air engine.

Putting It Right

Whenever you write *lead*, say it to yourself.

- Does it sound like *led*? If so, write **led** (unless you mean the element Lead, Pb).
- Does it sound like *lead*? If so, write **lead**.

Lose/Loose

In their most usual senses in science writing:

- **Lose** means to *cease to possess* or *misplace*
- **Loose** means *not restrained*

A loose fit.

The cover was loose.

<i>Wrong</i>	<i>Right</i>
The breeding pairs will loose their chicks if conditions do not improve.	The breeding pairs will lose their chicks if conditions do not improve.

Passed/Past

Examples of use:

Passed

The law that has just been passed states that ...

Somatic injury is not passed on to the next generation.

Past

In the past ...

Past practices ...

Over the past year ...

The road runs past the waterfall.

Principal/Principle

Principal: The most important, the highest in rank, the foremost:

The study was made up of five principal sections.

The principal of the institution said that...

Principle: A fundamental basis of something:

- Archimedes’ principle ...
- The chief investigator has no principles.
- The principles of the investigation were ...

Their/There

Their is never followed by **is, was, will, can, should, would, could, may, might**.

Wrong: Their was, their is, their could be/should be/would be, their will, etc.

Right: **There was, there is, there could be/should be/would be, there will;** etc.
On all other occasions (except when you are saying something is ‘over **there**’), you are likely to need **their**.

<i>Wrong</i>	<i>Right</i>
Their are a number of strategies that countries can take.	<i>There</i> are a number of strategies that countries can take (You can’t have <i>their</i> and <i>are</i> together.)
In there advanced form, they are superior to petrol engines.	In <i>their</i> advanced form, they are superior to petrol engines.
Under high winds, small boats break from there moorings.	Under high winds, small boats break from <i>their</i> moorings.

Jargon phrases to avoid in formal writing

Some of the phrases to avoid:

a window of opportunity all things being equal as a last resort as a matter of fact at the end of the day at this point in time comparing apples with apples conspicuous by its absence easier said than done effective and efficient if and when in the foreseeable future	in the long run in the matter of it stands to reason last but not least level playing field many and diverse needless to say on the right track par for the course slowly but surely the bottom line going forward
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Write to inform, not to impress

Guideline: Write as you would speak in comfortable, serious conversation.

When they write, many people tend to choose long words, thinking that they are more impressive than the shorter ones used in conversation. The result is pompous and tedious to read.

When writing, think of the clearest way of expressing something. The reader will be impressed not by long words but by clarity.

The following list contains pairs of words that mean the same thing. Technical and professional writers will almost invariably choose the word in the first column, and end up sounding pompous. Your writing will be more direct if you choose the shorter word. But don't avoid the longer words altogether. Avoid using them exclusively, and aim for a mixture of long and short. This will help your reader not to be bored.

<i>Pompous Word</i>	<i>Short Word</i>
Anticipate	Expect
Assist	Help
Commence	Start
Desire	Want
Endeavour	Try
Indicate, reveal	Show
Locate	Find
Purchase	Buy
Request	Ask
Require	Need
Terminate	End
Utilise	Use

The split infinitive

Split infinitives aren't nearly as important as they are often made out to be. There isn't, as many people suppose, a rule that says an infinitive should not be split; it is merely an invention observed by them in the mistaken belief that they are showing their knowledge of 'good' writing. Rigorously sticking to such outmoded ideas does just the opposite; it interferes with your ability to communicate effectively. Only misinformed pedants criticise a piece of writing because it contains a split infinitive.

What is an infinitive? This is a verb form. When *to* is followed by a verb (the 'doing' word), it is said to be an infinitive: to differentiate, to prepare, to analyse, etc.

A split infinitive is when words come between *to* and the verb:

They were urged to *seriously* reconsider their stand.

Pedants would insist that this sentence be rewritten. However, the three rewrites sound awkward:

They were urged to reconsider seriously their stand.

They were urged seriously to reconsider their stand (*this is ambiguous*).

They were urged to reconsider their stand seriously.

However, a lengthy interruption is not good:

The political will is lacking to resolutely, wholeheartedly and confidently reform the tax system.

Sometimes, a split infinitive is needed to avoid ambiguity:

He would like to really learn the language.

The alternatives are ambiguous: *He would like really to learn the language* could mean the same as *He would really like to learn the language*.

Putting It Right

Write whatever sounds the least awkward. Only misinformed people worry about split infinitives.

However, you need to be aware that some assessors fall into this category. They will hunt split infinitives down and delight in pointing out each one. So avoid writing them if possible.

How long should a sentence be?

Short sentences are more digestible. You can also get into less trouble with their construction. Modern writing and word processor grammar checkers tend to describe sentences of over 25 words as too long. However, don't treat this as an absolute. Your readers will be bored if you deal them equal-length sentences one after another. The occasional longer sentence, if it is well constructed and not overloaded with ideas, will make your writing more interesting.

Variety is important in sentence length. Aim for an *average* of 20–25 words per sentence, but oscillate around the mean.

How long should a paragraph be?

As with sentences, varying the length of paragraphs is another way of avoiding boring your reader. Avoid very long paragraphs; black, uninterrupted text is discouraging.

Many people find effective paragraphing tricky; knowing that long paragraphs are bad, many seem to decide quite arbitrarily on where paragraph breaks should be placed. The result is an incoherent text.

It is difficult to give guidelines how to paragraph effectively, but as a general rule, It can be said:

- One main idea per sentence.
- One theme per paragraph. If there is a natural break in what you are writing, start a new one.
- The first sentence of a paragraph – the *topic sentence* – should introduce the theme of each paragraph.

Verbs and Vivid Language

Vivid language is not something that most people associate with technical writing. Yet if readers are given dull, impersonal prose, they get bored. A lot of technical writing is dull, and much of the problem is to do with the way we use verbs.

Active versus passive voice

Many word processor grammar checkers and writing handbooks tell us to use the active voice of the verb, not the passive. This is not useful advice because most scientists and engineers have no idea what the active and the passive voices of the verb are.

We will now ask the following:

- What is meant by the active and passive voices?
- Is using the passive voice bad?
- What happens when we distort the passive voice and make *really* pompous sentences?

Recognising the active and passive

Many people recognise a verb as the ‘doing’ word of a sentence. The following sentence has a subject (or actor), *acid etching*; a verb, *removed*; and an object or receiver, *rust*.

Acid etching removed the rust.			Active voice of the verb
Actor	verb	receiver	

This sentence is in the **active voice** because the order of the flow is *actor*, *verb*, *receiver*.

If this sentence is turned around, we have the following:

The rust was removed by acid etching.			Passive voice of the verb
Receiver	verb	actor	

When the order of flow is *receiver*, *verb*, *actor*, the sentence is in the **passive voice**.

What happens when an active sentence is turned around into the passive voice?

- The emphasis has changed. In the active sentence, the emphasis was on *acid etching*; in the passive form, *rust* is emphasised.
- The order of the flow is reversed.
- The number of words in the verb increases – *removed* becomes *was removed* – as a result of adding forms of the verb *to be*.
- An extra word is needed (*by*).

Is using the passive voice bad?

No. The passive voice is not intrinsically bad, in spite of what grammar checkers and many writing textbooks tell us. We need the passive; it stops us from having to use *I* and *we*. In technical writing we would write, quite naturally:

The pH was maintained at 6.8 (passive) implying **The pH was maintained by me at 6.8.**

The active version is unacceptable: **I maintained the pH at 6.8.**

But sometimes we can actively choose which voice of the verb to use. For instance, if we were writing a paragraph about bees and their relationship with pollen, we would write:

Bees carry pollen (*active*).

If the paragraph were about pollen, we'd write:

Pollen is carried by bees (*passive*).

Each of these is completely acceptable; it depends on which emphasis we need.

Taking the passive voice one step further: the distorted passive

What is bad is to take the passive one step further into a distorted form. Then the verb becomes hidden in a sort of a noun. This happens often in science and technological writing.

Let's consider the progression in these sentences:

Acid etching removed the rust. Turn this around and it becomes: The rust was removed by acid etching. If the verb <i>was removed</i> becomes hidden in a sort of noun, it becomes: Removal of the rust was by acid etching. Hidden verb a missing verb	Active voice Passive voice Distorted passive	Acceptable Acceptable Tedious, pompous
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Ask someone to insert the missing verb, and the suggestions are always the same: The favourites are **achieved, accomplished, carried out, performed, undertaken.**

Now we've lost the skeleton of the sentence. We've gone from *Acid etching removed*, or *The rust was removed* – both of which are good – to *Removal was carried out*, *Removal was achieved*, etc., which sound pompous.

This distortion is a common way of writing tedious, impenetrable prose in science. It often sounds completely normal because we've become used to seeing it.

The ohmmeter measured the resistance. Resistance was measured by the ohmmeter. Measurement of the resistance was carried out by the ohmmeter.	Active voice Passive voice Distorted passive	Acceptable Acceptable Tedious, pompous. Not needed.
--	--	---

I measured the leaf area daily.	Active voice	Not generally acceptable
The leaf area was measured daily.	Passive voice	The acceptable style for technical writing
Daily measurements of leaf area were carried out.	Distorted passive	Unnecessary distortion

A method of seeing its absurdity: We are so used to seeing the distorted passive in professional writing that the absurdity of the construction is only obvious when it's seen in an everyday context:

Cinderella dropped the glass slipper.	Active	Acceptable
The glass slipper was dropped by Cinderella.	Passive	Acceptable
Dropping of the glass slipper was carried out by Cinderella.	Distorted passive	Absurd

Putting it right

How do you rewrite the distorted passive?

- If you find yourself using **achieved, accomplished, carried out, performed, undertaken**, you are very likely to be in the distorted passive. So keep these words in mind as danger signals.
- Find the hidden verb. It will be earlier in the sentence, probably be in a word ending with *...ing, ...tion* or *...ment*.
- Use it to rewrite the sentence, using either a simple passive construction or the active.

Lifeless verbs

Lifeless verbs halt the movement of a sentence. The worst offenders are *exist, occur*, and various forms of the verb *to be*.

<i>Original Lifeless Version</i>	<i>Rewritten Version</i>
Increasing temperature occurred. The purpose of this report is to describe the different stages of wastewater treatment.	The temperature increased. This report describes the different stages of wastewater treatment.

Excessive use of nouns instead of verbs

Some lifeless verbs can mutate into nouns, and the pace slows down:

- Indicates *becomes* is an indication of.
- Suppose *becomes* make the supposition.

<i>Original Lifeless Version with Verb Mutated to Noun</i>	<i>Rewritten Using Verb</i>
The colour of the outfall was an indication of severe pollution. We may therefore make the supposition that ...	The colour of the outfall indicated (or <i>showed</i>) severe pollution. We may therefore suppose that ...

Subject/Verb agreement

Make sure that the subject (actor) of your sentence agrees with the verb.

<i>Original Incorrect Version</i>	<i>Corrected Version</i>
Mazda were the only company that had persevered with the rotary engine concept. The greatest loss of lives as a result of a volcanic eruption have occurred through pyroclastic flows and tsunamis.	Mazda <i>was</i> the only company that had persevered with the rotary engine concept. The greatest loss of lives as a result of a volcanic eruption <i>has</i> occurred through pyroclastic flows and tsunamis.

Note: The verb is referring to *loss* (singular) not *lives* (plural).

The correct form of the verb

(For simple examples of forms of the verb, see Appendix 2: *The Parts of Speech and Verb Forms*.)

Decisions about the proper use of tense can be confusing. There are no absolute guidelines. Use the following information to decide whether you need the present or the past tense, then use your instinct together with Appendix 1, page 261, to decide on the specific form. Here are suggestions for deciding which tense to use in technical documentation:

- 1. A form of the **Past tense** for describing:
 - **Procedures and techniques:**
The samples were fixed in osmium tetroxide (*you are describing a procedure*).
 - **Results** (yours and other people’s):
Brown (2010) found that the numbers of protozoa increased in mature biofilm (*you are describing other people’s results*).
- 2. A form of the **Present tense** for describing:
 - **Established knowledge and existing situations:**
It has long been known that plants flower (*present*) **under environmental conditions that maximise seed set and development.**
 - **For your answers to the research question:**
The results of this study suggest that *Nitrosomonas* species are (*present*) **slow-growing and very sensitive to environmental change.**
 - **Illustrations:**
Figure 10 shows the effect of temperature on the solubility of the salt.
 - **Morphological, geological and geographical features:**
The eucervical sclerites are connected to the postcervical sclerites, each of which is differentiated into a relatively hard sclerotised base and an elastic distal part.

All three paleosols show a greater degree of development than the surface soils. Better development is displayed in terms of greater clay accumulation, higher structural grade, harder consistency and thicker profiles.

- **The theoretical background** (*you are describing established knowledge*)

3. Specific uses:

- The *conditional*, *subjunctive* or the *imperative* forms can be used when giving recommendations.
- The *imperative* form is used in procedures or sets of instructions.
- The *future* form will be needed in the *Materials and Methods* section of a research proposal.

For examples of text, see the following:

- Chapter 6: *A Journal Paper*, the various sections
- Chapter 12: *Procedures or a Set of Instructions*
- Chapter 5: *A Research Proposal*

Putting it right: verb tense

As a general indication, use past tense for almost everything, but use the present for describing the following:

- Established knowledge and theory
- Illustrations
- Morphological, geological and geographical features

Recognising and Correcting Incomplete Sentences

The use of incomplete sentences – sentence fragments – is a common mistake and can greatly irritate assessors.

It's difficult to define incomplete sentences and their rewriting without resorting to classical grammar, but we'll try.

Rule-of-thumb: Anything between two full stops (that is, a sentence) should sound complete in itself.

Finite verbs make a sentence sound complete

Most people can find the verb, the 'doing' word, in a sentence. If the main verb in a sentence is what is termed 'finite', then the sentence sounds complete. Rather than define what makes a verb finite, let's just say that if a sentence feels complete, then the verb is finite:

Many factors *affected* the resident population.

The emissions *increased*.

Chapter 12 *presents* the conclusions.

Now consider the following examples. In each case, the first sentence is complete; the second ‘sentence’ is incomplete because the verb isn’t finite. To test this, try saying the second part of each example completely in isolation; it will feel unfinished.

More intensive agriculture will cause an increase in global warming. The reason being that ruminants and paddy fields produce methane.
When running on petrol, the carbon dioxide emissions were higher. Which was an indication of improved mixing and less cylinder-to-cylinder variation.

Recognising them and correcting them

There are two main ways in which incomplete sentences creep into technical writing:

- 1. Where the incomplete ‘sentence’ has a word ending in *-ing* at or near the start of it (*The reason being* is a favourite), then:
Method 1: Join it up with the previous sentence with a comma.
or
Method 2: Rewrite it using a finite verb. It should sound complete in itself. Just use instinct – it usually works.

<i>Original Incorrect Version</i>	<i>Corrected Versions</i>
	<i>Corrected Using:</i> <ul style="list-style-type: none">• <i>Method 1 (a comma)</i>• <i>Method 2 (using a finite verb in the second sentence)</i>
More intensive agriculture will cause an increase in global warming. The reason being that ruminants and paddy fields produce methane.	<i>Method 1</i> Increasing agriculture will cause an increase in global warming, the reason being that ruminants and paddy fields produce methane. <i>Method 2</i> Increasing agriculture will cause an increase in global warming. The reason is that ruminants and paddy fields produce methane.
There are a number of strategies that countries can take. For example, promoting non-wood fuel sources, paper recycling and pricing forest products more efficiently.	<i>Method 1</i> There are a number of strategies that countries can take, for example, promoting non-wood fuel sources, paper and pricing forest products more efficiently. <i>Method 2</i> There are a number of strategies that countries can take. For example, they can promote non-wood fuel sources, recycle paper and price forest products more efficiently.

- 2. Where the second, incomplete ‘sentence’ starts with *Which* (when it’s not a question) It’s very common to see this in commercial material, for example:
All of these plans have been designed with you in mind. Which is why you’ll find one that’s just right for you.

However, this is unacceptable in technical writing.

Method 1: Use a comma instead of a full stop.

Method 2: If inserting a comma makes the sentence too long, rewrite the second part. You can generally start the second sentence with **This is/was/will be**

<i>Original Incorrect Version</i>	<i>Corrected Versions</i>
<p>When running on petrol, the carbon dioxide emissions were higher. Which was an indication of improved mixing and less cylinder-to-cylinder variation.</p>	<p><i>Corrected Using:</i></p> <ul style="list-style-type: none"> • <i>Method 1 (a comma)</i> • <i>Method 2 (starting another sentence using This is/was/will be ...)</i> <p><i>Method 1</i> When running on petrol, the carbon dioxide emissions were higher, which was an indication of improved mixing and less cylinder-to-cylinder variation.</p> <p><i>Method 2</i> When running on petrol, the carbon dioxide emissions were higher. This was an indication of improved mixing and less cylinder-to-cylinder variation.</p>

Summary: incomplete sentences

Methods for recognising incomplete sentences:

- Look for words ending in **-ing** at or near the start of a sentence.
- Look for **Which** at the start of a sentence, when it's not a question.

Say it out loud. Use instinct. A sentence fragment will generally sound odd. If you say 'This being devastating for the farmers' completely in isolation, it feels incomplete. However, 'This was devastating for the farmers' sounds complete.

- If it feels incomplete, it probably needs rewriting.

When English Is an Additional Language

Anyone who is learning another language knows that writing is the most difficult task of all.

This chapter contains a number of sections that are useful to a speaker of English as an additional language. The following section gives a few basic guidelines about writing a document in English.

1. Think in English.

You will have more success if you think in English and construct your sentences in English. If you compose in your own language and then translate, you might translate the constructions and idioms of your own language into English.

If your language is a European language, your assessor will probably be able to understand a literal translation.

Example: By a German speaker:

This is known since long to affect development of the embryo.

But for languages that are not related to the European languages, there is a much greater possibility of constructing text that does not convey your meaning.

2. Write short, clear sentences.

In a technical document, your aim is to present your material as clearly as possible. When you are working in English, it is better to write short, clear sentences, even if they are too short to be regarded as good style. Longer sentences can become complicated and your meaning may not be clear.

3. Typical mistakes

It is impossible to give meaningful examples here; mistakes in English will depend on the structure of your first language. But try to build up a list of typical mistakes that a speaker of your language makes; e.g. by listing corrections made by your assessors.

How to write the English of your own specialist field

Actively work at improving your written skills. If you do not understand English well, or you can only speak it slightly, English can become a background noise. When this happens, your written skills will stay fixed at a low level. It is very easy to become involved in your experimental work, and speak mostly in your own language to friends and family. You need to actively work at increasing your skills. Here are some suggestions about how to do it:

- 1. Read as many papers in your field as you can.** You will find that there are sentences and constructions that occur so commonly that you can modify them and use them for your own writing.
- 2. Look up words you don't know in a dictionary.** It is too easy to get only the general sense of a paper when reading it, rather than using it to increase your word power. For technical terms, you may need to use a scientific or technical dictionary or encyclopaedia.
- 3. Write things down.** Words, constructions and idioms are easily forgotten if you don't actively work at remembering them. Making a list of them does two things:
 - Writing them down makes you remember them.
 - You have a reference list of useful material.

Later, when you become more skilled in English, this list will look unbelievably simple; but at this early stage, it is essential.

- 4. Actively listen to seminars and lectures.** Keep adding to your list while you listen. This will also give you the sort of spoken English that is used in formal presentations. This can be more idiomatic than journal paper English and can cause more problems because you can't go back and read it again.