Being Concise and Removing Redundancy

Cut, cut and then cut again

- *The research focused on the comparison between the year 2003, when a severe spring frost occurred, and the 2006–2008 period, characterized by a lack of natural spring frosts.
- We compared 2003, when a severe spring frost occurred, with 2006–2008, when there were no natural spring frosts.

What if we are redundant

- If your reader has to search for key information that is hidden in a mass of redundant words, then you are *forcing them to make an unnecessary effort*.
- If readers find redundancy in the first sentences of a text, they will assume that there is a good chance that the rest of the text also contains redundancy.
- This means that they will start to read quickly and instead of reading each individual word, *they will* start to scan your text.

A real comment from a referee

• The paper was **extremely long** and must be massively reduced in length. ... It was packed full of vague **statements** The abstract was **far too long**. ... The opening sections were superfluous ... I would like to see some **concrete examples**, rather than the somewhat **long-winded technical explanations** that were not very clear. The author could easily **reduce the length by 25%.** This can be achieved without removing any real content and I believe that the result would be that the paper would read more fluently and the pace would be quicker.

Two points regarding the comment

• These comments were not directed at the level of her English (which is very high) but simply at her **style of writing**.

• Everything you write **should add value**. Don't just cut words. Consider cutting sentences, paragraphs, even whole subsections. If you eliminate the unnecessary and try to be precise, **your important points will stand out clearly for the reader**.

Cut, cut and then cut again

- * There is a wide variety of studies dealing with the evaluation and the achievement of clarity in technical manuals. We will discuss a certain number of them that in our opinion are of particular interest to our research.
- Several studies on clarity in technical manuals can be found in the literature [for a review, see refs. 10 and 15]. We discuss three papers that we believe are most relevant to our research.

Write less, make less mistakes

- S1. *The activity aimed *at / to* the extrapolation of the curve is not trivial.
- S2. *We did the calculation manually. This *choice* / *choose* meant that ...

- S3. The extrapolation of the curve is not trivial.
- S4. We did the calculation manually. This meant that ...

Cut redundant words

- It was small [in size], round [in shape], yellow [in color] and heavy [in weight].
- This will be done in [the month of] December for [a period of] six days.
- Our research [activity] initially focused [attention] on [the process of] designing the architecture.
- The [task of] analysis is not [a] straightforward [operation] and there is a [serious] danger that ...
- The analyses [performed in this context] highlighted [among other things] the [fundamental and critical] importance of using the correct methodology in a consistent [and coherent] manner [of conduction].

Avoid generic words

- They add no value to what you are saying. They are very abstract and not memorable words for the reader.
- First decide if you could cut them. If not, try to find a more concise and concrete alternative.
- activity, case, character, characteristics, circumstances, condition, consideration, criteria, eventuality, facilities, factor, instance, intervention, nature, operation, phase, phenomenon, problem, procedure, process, purpose, realization, remark, situation, step, task, tendency
- Don't use pairs of adjectives or nouns that essentially mean the same thing: the analysis of important [fundamental and practical] problems [and phenomena] of engineering

Prefer verbs to nouns

ORIGINAL VERSION (OV)

X was used in the *calculation* of Y.

Symbols will be defined in the text at their first occurrence.

Lipid *identification* in paint samples is based on the *evaluation* of characteristic ratio values of fatty acid amounts and *comparison* with reference samples.

REVISED VERSION (RV)

X was used to calculate Y.

Symbols will be defined when they first occur in the text.

Lipids are generally *identified* in paint samples by *evaluating* the characteristic ratio values of fatty acid amounts and *comparing* them with reference samples.

Use one verb instead of a verb + noun

ORIGINAL VERSION (OV)

X showed a better performance than Y.

Heating of the probe can be *obtained* in two different ways:

The *installation* of the system is *done* automatically.

The *evaluation* of this index *has been carried out* by *means* of the correlation function.

REVISED VERSION (RV)

X performed better than Y.

The probe can be heated in two different ways:

The system is *installed* automatically.

This index was *evaluated using* the correlation function.

Use one verb instead of a verb + noun

ORIGINAL VERSION (OV)

In Figure 2 the curve *exhibits a downward trend* (portion A–B); then it *undergoes a rapid rise* (part B–C), it then *assumes a leveled state* (zone C–D). It *possesses a peak* at point E before displaying a slow decline ... On the other hand, the curve in Fig 3 *is characterized by a different behavior*.

REVISED VERSION (RV)

In Figure 2 the curve initially *falls* (segment A–B) and then *rises rapidly* (B–C). It then *levels off* (C–D). Finally it *peaks* at point E before falling slowly ... On the other hand, the curve in Fig 3 *behaves* differently.

Reduce the number of link words

ORIGINAL VERSION (OV)

Our data highlighted a significant toxic effect. (1) *In fact*, cell survival in cultures inoculated with elutriates was about 75% of the control. respectively. (2) Considering that several heavy metals (HMs) are known to be carcinogenic compounds, the metal contamination may explain some of the toxicity. (3) Moreover, in complex mixtures, HMs may also act as co-mutagens, (4) increasing the toxic activity of other compounds (Brogdon, 2011). (5) In particular, cadmium could be responsible for the mutagenic effects. (6) In addition, the high concentrations of chromium may be responsible for the toxic effects, (7) given that chromium is a potent mutagenic compound (Ray, 1990) and it is also ...

REVISED VERSION (RV)

Our data highlighted a significant toxic effect. (1) In fact, cell survival in cultures inoculated with elutriates was about 75% of the control, respectively. (2) Several heavy metals (HMs) are known to be carcinogenic compounds, thus the metal contamination may explain some of the toxic results. (3) In complex mixtures, HMs may also act as co-mutagens, (4) thus increasing the toxic activity of other compounds (Brogdon, 2011). (5) Cadmium could be responsible for the mutagenic effects. (6) In addition, the high concentrations of chromium may be responsible for the toxic effects. (7) Chromium is in fact a potent mutagenic compound (Ray, 1990) and it is also ...

Choose the shortest words

SHORT	LONG	SHORT	LONG
advise, urge	recommend	now	currently
aim	objective	potential	potentiality
also	furthermore	show	demonstrate
but	however	spread	proliferation
end	termination (n), terminate (v)	thus	consequently
have	possess	use	utilization (n), utilize (v)
improve	ameliorate	usual	customary
keep	maintain	very	extremely
later	subsequently		

Choose the shortest expressions

• Note that ... =

- It must be emphasized / stressed / noted / remarked / underlined that...
- It is interesting to observe that ...
- It is worthwhile bearing in mind / noting / mentioning that ...
- It is important to recall that ...
- As the reader will no doubt be aware that...
- We have to point out that ...

Use the shortest adverbial expression

- *To do this, the application searches for solutions in an automatic way / fashion / mode.
- To do this, the application searches for solutions **automatically**.
- *This should be avoided since it is generally the case that it will fail.
- This should be avoided since it generally fails.
- *From a financial standpoint, it makes more sense to ...
- Financially, it makes more sense to ...

Avoid pointless introductory phrases

- The results of this work may be synthesized as follows.
- Let us recapitulate some of the results obtained in this study.
- The salient results are summarized in the following.
- In conclusion, we can say that ...

Avoid impersonal expressions

ORIGINAL VERSION (OV)

It is necessary / mandatory to use X.

It is advisable to clean the recipients.

It is possible that inflation will rise.

REVISED VERSION (RV)

X must be used.

X is necessary / mandatory.

The recipients *should* be cleaned.

Inflation may rise.

Avoid impersonal expressions

ORIGINAL VERSION (OV)

It is surprising that no research has been carried out in this area before.

It is regretted that no funds will be available for the next academic year.

It is clear / evident / probable that inflation will rise.

REVISED VERSION (RV)

Surprisingly, no research has been carried out in this area before.

Unfortunately, no funds will be available for the next academic year.

Inflation will *clearly / probably* rise.

Avoid impersonal expressions

ORIGINAL VERSION (OV)

REVISED VERSION (RV)

It is anticipated / believed that there will be a rise in stock prices.

It may be noticed that ... It is possible to observe that ...

We *expect* a rise in stock prices.

We *believe* there will be a rise in stock prices.

A rise in stock prices is expected.

Note that ...

Reduce your authorial voice

ORIGINAL VERSION (OV)

As in the previous case we observe that there are three distributions of this measure:

We can identify two categories of users ..

Thus, in this analysis we decided to focus our attention on ..

It is now time to turn our attention, in the rest of the paper, on the question of ..

We find it interesting to note that x = y.

As we can see in Fig. 1, for each network we have a series of different relationships.

REVISED VERSION (RV)

There are three distributions of this measure:

There are two categories of users ..

This analysis focuses on ...

The rest of the paper focuses on the question of ...

Interestingly, x = y.

Figure 1 highlights that there is a series of different relationships for each network.

Be concise when referring to figures and tables

ORIGINAL VERSION (OV)

Figure 1 shows schematically / gives a graphical representation of / diagrammatically presents / pictorially gives a comparison of two components

From the graphic / picture / diagram / drawing / chart / illustration / sketch / plot / scheme that is depicted / displayed / detailed / represented / sketched in Figure 3, we can say that ...

The mass spectrum, reproduced in the drawing in Figure 14, proved that ...

We can observe / As can be seen from Table 3 that ...

From an analysis / inspection of Table 3 it emerges that ...

REVISED VERSION (RV)

Figure 1 shows a comparison of two components.

Figure 3 shows / highlights / reports that ...

The mass spectrum (Fig. 14) proved that ...

Table 3 highlights that ...

Use the infinitive when expressing an aim

ORIGINAL VERSION (OV)

We use X for the purposes of showing the suitability of Y for the description of Z.

In order to maximize channel utilization ...

The design of software is aimed at supporting multimedia services.

REVISED VERSION (RV)

We use X to show how Y is suitable for describing Z.

To maximize channel utilization ...

The software is designed to support multimedia services.

The software *supports* multimedia services.

Redundancy versus Conciseness: an example

ORIGINAL VERSION (OV)

ICT technologies are expected to hold the ignition key to the reduction of the greenhouse gases produced worldwide, which is a nondebatable global priority. The importance of "greening of the Internet", therefore, is recognized as a primary design goal of the future global network infrastructures. *Indeed*, the Internet *today* already accounts for about 2% of the total world energy consumption, but with the current trend of shifting offline services online, this percentage will grow significantly in the next few years, and it will be pushed further by the forthcoming Internet-based platforms that require always-on connectivity. In this paper we present ... (101 words)

REVISED VERSION (RV)

ICTs hold the key to *reducing* greenhouse gases. Greening the Internet is a primary design goal of future global network infrastructures. The Internet already accounts for about 2% of total world energy consumption and *now that offline services* are being shifted online. This percentage will grow significantly and will be further fuelled by the forthcoming Internet-based platforms that require always-on connectivity. We present ... (64 words)

The result

- 30% increase in readability
- 30% less chance for making mistakes in English clearly the less you write, the fewer potential mistakes you can make
- 30% more space available for you to give the reader useful information
- 30% less paper, ink and energy used not only do we need to 'green' the Internet, we need to 'green' our writing too!