

## PHY1600 – Effective Communication for Physicists

### Some Common Grammar Difficulties

**LIKE/AS/AS IF:** ‘Like’ (a preposition) joins nouns and pronouns, or governs a noun; before phrases and clauses the equivalent word is ‘as’ (a conjunction). The over-use of ‘like’ in modern colloquial speech has made its misuse more likely. However, I support the safer, hard-line position of Strunk and White.

#### **These are acceptable:**

1. A is like B. (Here, “like” governs a noun) 2. A behaves as B does. (“as” introduces a clause with a noun and a verb). 3. Mercury is a planet like Venus. (acceptable grammatically, but ambiguous – Mercury, like Venus, is a planet). 4. He eats like a pig.

**These, in formal writing, are not:** 1. It was like we were thinking out loud. 2. He eats like there’s no tomorrow. 3. Winston tastes good like a cigarette should. 4. She’s a good student, like her brother was before her. 5. It looks like it’s going to rain. 6. “It looks like the party is about to begin”.

However, confusingly, in expressions where the verb is implied rather than expressed ‘like’ is admissible. 1. A behaves like B. 2. She’s a good student, like her brother. 5. It looks like rain. 6. “Fluorescent tubes emit incoherent light, like a common light bulb”. (The construction: “Fluorescent tubes emit incoherent light, as does a common light bulb”, is correct but, in my view, excessively pedantic.)

**Quick Tip** - Do not use ‘like’ if ‘as’ or ‘as if’ will work.

**AMONG /AMONGST:** Either form is fine; ‘amongst’ is less common than the more modern ‘among’, but it is still in common usage.

**AND/BUT:** ‘And’ and ‘but’ are co-ordinating conjunctions, used to join individual words, phrases, and independent clauses. This definition implies that they should not normally be used as the first word of a sentence. However, occasionally they can be so used to give emphasis. I recommend that, only if you are very confident of your writing ability, should you start a sentence with ‘and’ or ‘but’.

**WHICH/THAT:** ‘That’ is restrictive – the bicycle that is in the shed is green (referring to a specific bicycle). ‘Which’ is descriptive, e.g. adding some information about an object that has already been defined - the bicycle, which is in the shed, is green. ‘Which’ is not restrictive. The ‘which’ clause is contained within commas.

**COMPRISE/COMPOSE.** To comprise means ‘to include’ or ‘to be made of’.

To compose means ‘to make of’ or ‘to form’.

e.g. Water is comprised of H and O - is imprecise (not wrong)

BUT Water is composed of H and O - is better.

Both ‘A soccer team comprises eleven players’ and ‘A soccer team is composed of eleven players’ are both correct. ‘Eleven players compose a soccer team’ is correct, ‘A soccer team composes eleven players’ is not.

**TOWARD/TOWARDS.** Both are correct. I prefer the shorter one!

**ABBREVIATIONS.** In general, do not use abbreviations such as ‘don’t’, ‘can’t’, etc. in formal writing.

**ACRONYMS.** To be on the safe side, always define acronyms in parentheses immediately after the first use of the full description – e.g ‘Canadian Association of Physics (CAP)’.

**PUNCTUATION.** Punctuation is like the spice added to food; judicious use adds emphasis, interest, and liveliness, without overwhelming the basic flavour.

- Periods: experiment with removing periods that separate two closely associated sentences.
- Commas: read your work aloud – or at least sub-vocally – and insert commas only where you normally pause. In lists of three or more items, modern usage suggest a comma after each item, including the penultimate one (i.e. ....x, y, and z).
- Dashes: “A dash is a mark of separation stronger than a comma, less formal than a colon, and more relaxed than parenthesis” (Strunk and White). Note the implication: a dash can replace commas, colons, and parentheses. My suggestion is to avoid the use of dashes in formal writing.

**ADVERBS.** Adjectives modify (or qualify) nouns (big, blue, bad, better, etc.); adverbs qualify everything else - verbs, another adverb, a phrase, or a clause. (fast, late, often, yesterday, here, well, better, many words ending in -ly, etc.). Adverbial phrases take the place of one-word adverbs. While adverbs and adverbial phrases add much of the colour and excitement to fiction, poetry, advertizing, political discourse, etc., I believe that their use should be limited in formal scientific writing where precision is vital. I suggest that you comb your first draft and identify all adverbs and adverbial phrases. Then consider the effect of omitting each one; if the meaning is unchanged or, as is often the case, made stronger or more precise, remove it! – or, if necessary, replace it with more elegant, effective, or precise language. Of course, some adverbs and adverbial phrases are essential; these are the only ones you should retain.

Here are some examples:

1. The oven was very hot. *Remove ‘very’ – imprecise.*
2. In the past, experimenters used silicon to .... *Remove ‘in the past’ – the verb gives the time.*
3. Furthermore, this theory predicts ... *Remove ‘furthermore’ – adds little to the meaning.*
4. As such, the reasoning is faulty. *Remove ‘As such’ – this phrase adds nothing to the meaning. Never use it!*
5. Students were incredibly enthusiastic. *Remove ‘incredibly’ – this word should never be used in good writing unless it means ‘impossible to believe’.*
6. The results are obviously wrong. *Remove ‘obviously’ – adds nothing to the statement, except a subjective opinion (obvious to whom?).*
7. I believe strongly that lectures are unnecessary. *Remove ‘strongly’ – adds little (“Methinks the lady doth protest too much”- W. Shakespeare).*
7. The research is largely incomplete. *Remove ‘largely’ – either it is or it isn’t complete. You can’t be somewhat pregnant! Never use largely, mainly, partially, fairly, etc.*
8. These magnetic fields are actually quite common. *Remove ‘actually’ and ‘quite’ – always! See 7 above.*
9. Not only do apples taste good, they are also good for your health. *Don’t use ‘not only ... but also’ unless you mean to emphasize the contrast between two objects. Replace by a simple ‘and’*

References:

Strunk and White, *The Elements of Style*. Longman 1999.

Michael Alley, *The Craft of Scientific Writing*. Springer 1995

# SHARPEN UP YOUR WRITING! (from *Scientists Must Write* by Robert Barass)

Circumlocution: the use of many words where few would do better

Circumlocution	Better English
in virtually all sectors of the environment	almost everywhere
maintain a high degree of activity	move about a great deal
in black and white only	in black and white
if at all possible	if possible
peer groups	equals
I myself would hope	I hope
I would have said	I think
you are in fact quite correct	you are right
mechanisms of a physiological nature	physiological mechanisms
on an experimental basis	by experiment
on a dawn to dusk basis	from dawn to dusk
on a regular basis	regularly
working towards a unanimous situation	trying to agree
by any actual person in particular	by anyone in particular
to show the same high level of application	to keep trying
an oral presentation	a talk
the reading and learning process	reading and learning
outside the kidney itself	outside the kidney
several ... are known to influence	several ... influence
not longer than 20 000 to 25 000 words	no more than 25 000 words
in length	words
measures on purely local terms	local action
a maximum depth of ten metres	ten metres deep
ten metres in length	ten metres long
over a period of the order of a decade	for about ten years
for a further period of fifteen years	for another fifteen years
the roads were limited in mileage	there were few roads
they utilize for sustenance	they eat
during the month of April	in April
at the pre-school level	the under fives
on a theoretical level	in theory
on the educational front	in education
in the classroom situation	in schools
in the school environment	in schools
They are without any sanitary arrangements whatsoever.	There is no sanitation.

Prefer a short word to a long word if the short word is more appropriate

Prefer this	... to this	Prefer this	... to this
do	accomplish	suggest	hypothesize
extra	additional	reputation	image
expect	anticipate	sign	indication
help	assistance	person	individual
simple	simplicistic	people	individuals
use	application	please	kindly
discovery	breakthrough	methods	methodology
begin	commence	change	modification
about	concerning	partly	partially
guess	conjecture	preventive	preventative
so	consequently	about	regarding
much	considerable	is	represent
build	construct	show	reveal
show	demonstrate	shortened	streamlined
meet	encounter	later	subsequently
except	excepting	enough	sufficient
show	exhibit	end	terminate
build	fabricate	use	utilize
first	firstly	almost	virtually
send	forward	guidance	guidelines

Tautology: saying the same thing twice using different words

Every individual one; may possibly go; on Friday 28th November next; the reason for this is because; in actual fact; one after another in succession; in the rural countryside; as an extra added bonus; I tentatively suggest; in my own personal opinion; on pages 1-4 inclusive; that by advance planning; will disappear from sight; in equal halves; in two equal halves; continue to remain; symptoms indicative of; temporary loan; but ... however; enclosed with this letter; or alternatively; grouped together; and ... moreover; superimposed over each other; topographical features.

Circumlocution	Better English	Circumlocution	Better English
In view of the fact that	because	try out	try
on account of the fact that	as	open up	open
if it is assumed that	if	aimed at	for
in spite of the fact that	although	count up	count
a sufficient number of	enough	check on	check
at this precise moment in time	now	later on	later
at that point in time	then	prior to	before
a greater length of time	longer	seal off	seal
during the time that	while	in between	between
on a regular basis	regularly	inasmuch as	since
it may well be that	perhaps	a number of	several
with the exception of	except	proved to be	were
using a combination of	from	in regard to	about
of a reversible nature	reversible	in all cases	always
which goes under the name of	called	in order that	to
with the result that	so	in most cases	usually
in all other cases	otherwise	at a later date	later
are found to be in agreement			
with	agree	a proportion of	some
carry out experiments	experiment	a great deal of	much
conduct an investigation into	investigate	at an early date	soon
bring to a conclusion	finish	in the nature of	like
arrive at a decision	decide	not infrequently	often
make an adjustment to	adjust	in the event that	if
make an examination of	examine	to say nothing of	and
undertake a study of	study	has an ability to	can
take into consideration	consider	a small number of	few
afford an opportunity to	allow	a large number of	many
in conjunction with	with	by the same token	similarly
after this has been done	then	for the purpose of	for
on two separate occasions	twice	in the vicinity of	near
the question as to whether	whether	in connection with	about
it is apparent therefore that	hence	until such time as	until
in view of the foregoing			
circumstances			
give positive encouragement to	therefore encourage	spell out in depth	explain
have been shown to be	are	in this day and age	now
		at the present time	now

The unnecessary qualification of words

Incorrect	Correct
absolutely perfect	perfect
the actual number	the number
an actual investigation	an investigation
not actually true	untrue
almost unique	not unique
almost perfect	imperfect
by means of	by or using
a categorical denial	a denial
completely surrounded	surrounded
conclusive proof	proof
cylindrical in shape	cylindrical
deliberately chosen	chosen
an essential condition	a condition
facing up to	facing
they are in fact	they are
few in number	few
green in colour	green
a positive identification	an identification
small in size	small
streamlined in appearance	streamlined
stunted in growth	stunted
swampy in character	swampy
quite impossible	impossible
quite obvious	obvious
hard evidence	evidence
real problems	problems
realistic justification	justification
they really are	they are
really dangerous	dangerous
the smallest possible minimum	the minimum
valid information	information
very necessary	necessary
very relevant	relevant
very true	true
wholly new	new