Common Grammatical Errors

Articles (a/an, the - and nothing)

This is often a problem for non-native English speakers – especially those where their native language does not have articles!

In general we use:

- **the** when we are referring to something the reader already knows about, or a specific instance of something (whether singular or plural)
- **a/an** for something the reader doesn't yet know about or any (rather than a specific) instance of a singular noun
- nothing when referring to any (rather than a specific) instance of a plural noun

For example (I use ** to indicate no article is inserted.):

- 'The girl was walking down the street' we are talking about a specific girl whom the reader knows about.
- 'The girls were walking down the street' we are talking about a specific group of girls that the reader knows about.
- 'A girl was walking down the street' we are talking about a girl at this stage we don't know anything about her.
- '** *Girls were walking down the street*' we are talking about a number of girls at this stage we don't know anything about them.

We also use 'the' when there is one, and only one, of something in a particular context:

e.g. 'Matching **the** LFR1-End profile gave a good score' Implies there is one and only one 'LFR1-End profile' in the context you are discussing. This is probably the most common scenario where a mistake is made.

Use 'a/an' when you refer to one of a selection (and you don't care which one):

e.g. '*Matching an LFR1-End profile gave a good score*' Implies that there are a number of LFR1-End profiles in the context you are discussing.

(Note that it is normal to use 'an' before an abbreviation like 'LFR' when in reading it out you would say "el-eff-arr").

The use of 'a/an' may also be more subtle. e.g. 'Figure 5 shows a flowchart of the algorithm' One might think that it should be 'the' as there is only one flowchart, but the reader hasn't heard about this flowchart before and potentially there could be lots of different ways of flowcharting the same algorithm and it doesn't really matter which one is shown.

Similarly one would say 'Figure 7 shows **a** diagram of an antibody' because one could create endless variations on that diagram and this is only one of those. On the other hand one would say 'The flowchart shown in Figure 5' since one is referring to that specific flowchart.

Use nothing when you are referring to a single thing which encompasses many examples:

e.g. '*The Kabat definition for* ** *region CDR-L2 is...*' i.e. there is one Kabat definition, but 'region CDR-L2' is a single thing which has many examples.

Use nothing when you are referring to a general concept rather than specific examples.

e.g. '** Entropy change is characteristic of....' Equally you could have said '** Entropy changes are characteristic of....'. (In contrast, if you were referring to specific changes which you had already discussed, you would say 'The entropy change...' or 'The entropy changes...')

Also, use nothing when you are providing a list. e.g. 'An alignment between ** sequences A and B'

Also, use nothing when you are referring to a proper noun or a label which uniquely identifies something from a list. e.g. 'The difference is shown in ** Figure 1' 'These were stored in SAAPdb' (SAAPdb is the name of a database) compared with 'These data were stored in the database' (referring to a specific database which we have already talked about) compared with 'These data were stored in a database' (referring to a database that the reader, as yet, knows nothing about).

However there are exceptions when the proper noun itself contains a general term qualified by some sort of descriptive (adjectival) term. So we refer to '*the Protein Databank*' because there are many databanks and the **Protein** Databank is one specific databank. Similarly we would say: '*these data were obtained from the Single Amino Acid Polymorphism Data Analysis Pipeline*'.

Contrast this with: 'sequences were obtained from ** SwissProt'. There is no fixed rule for dealing with abbreviations of these name. For example, by convention we would refer to 'the PDB', but simply to '** SAAPdb' [probably because PDB is just single letters while SAAPdb contains a pronounceable word - I need to think about more examples to confirm this]. Note that we would clearly say: 'These data were obtained from SAAPdap' or 'These data were obtained from the SAAP data analysis pipeline'. SAAP is now being used as an adjectival descriptor of 'data analysis pipeline'.

Similarly we would say 'Therefore, ** manganese will bind more strongly...' (because 'manganese' is a unique name), but we would say 'Therefore, a manganese ion will bind more strongly...' because 'manganese' is being used as a descriptive term for 'ion'. We would say 'the manganese' if we were referring to a specific manganese which we had identified previously. For example 'The manganese ion moves 1.5A in the mutant structure'.

As another example, if we have a chemical compound with two rings labelled A and B, we would say 'This affects the A-ring...' (where 'A' is being used as a descriptive term for 'ring') while we would say 'This affects ring A' ('ring' is a general term which then is qualified and made specific by the 'A'). We could also say 'This affects ** rings' (meaning that it affects all rings) or 'This affects a ring' (meaning it affects one of the rings in a structure, but we don't know which one, or 'This affects the ring(s)' (meaning the ring - or rings - which will already have been described).

Which and that

- 'Please fix the bicycle, which is in the shed.' the 'which...' is only for added information telling you where to find it
- 'Please fix the bicycle which is in the shed.'
 'Please fix the bicycle that is in the shed.'
 - the 'which...' or 'that...' qualifies the particular bicycle that needs to be fixed it's the one in the shed rather than the one in the garage. (Note that US English requires 'that' here. In UK English, 'which' is acceptable and generally regarded as more format than 'that').

Comprising / comprised of

- 'Comprising', 'Composed of' and 'Consists of' are correct
- 'Comprising of' and 'Comprises of' are wrong
- *'Comprised of'* is generally considered to be incorrect a confusion between the verbs *'to comprise'* and *'to compose'*. However, some consider it to be acceptable.