English Corner 1: the style of scientific text

A good style of scientific writing will achieve the aim of maximising the transfer of information from the writer to the reader. This requires not only choosing the most appropriate word, spelt correctly, in the right position in the sentence, with meaningful punctuation and good grammar, but also writing in a manner that is comprehensible at first reading. To avoid annoying the reader, pains must be taken to prevent the message being lost in a labyrinth of unnecessary or confusing descriptions, containing too many or difficult-to-pronounce abbreviations.

Acceptable text can be realised by **ensuring clarity**, **avoiding ambiguity** and **removing grammatical surprises** from the final draft. This is common sense, for if what is written is unclear, the reader **may have to guess** the intended meaning; if what is written is open to interpretation, the reader **may believe something unintended**; if what is written contains unusual words or words in an unusual word order, the reader **may have to re-read** the text to comprehend it.

Presenting unacceptable text is not only a discourtesy to the reader, but will reduce, delay or even prevent information transfer. Acceptable text is achieved by

Ensuring clarity and limiting confusion by

- preferring the *concrete* [the pH-dependence of enzyme activity needs examination] to the *abstract* [further experiments on similar topics are warranted], the *familiar word* [controversial] to the *unfamiliar* [polemical], the *short word* [previously] to the *long* [heretofore, hitherto], the *simple phrase* [even though] to the *complex* [notwithstanding the fact that] and the *ordinary clause* [before the meeting started] to the *grandiose* [prior to the commencement of the proceedings].
- omitting double negatives [In order to rule out the possibility that the signal was not due to contaminating leukocytes ...]: do you mean was due to?; misplaced participles [miRNAs have been shown to correct the abnormal activation of Wnt/β-catenin signalling resulting in inhibited tumour growth]: does resulting refer to the abnormal activation or its correction?; shorthand [and/or, either/or, he/she]: does the slash mean and or or?; and unbalanced sentences [Of the two sperm populations, one had epithelial contact and intact acrosomal membranes and the other did not have epithelial contact and damaged acrosomal membranes]: did the other group have intact or damaged membranes?

Creating enjoyable text by

- removing the *difficult to pronounce* [and/or, either/or, he/she]; *surprises* [The aqueous layer was removed, the solvent concentrated, and the residue exploded]: was the explosion *deliberate*?; *too many abbreviations* [The OR of both PR and AR of the PV vs. VV samples were ...]; and *verbiage* [It should be borne in mind in this connection that ...].
- adding variation, with the use of repetition [to emphasise a point], pronouns [to avoid repetition] and synonyms [to prevent monotony when repetition is needed].

- not using clichés [to the best of our knowledge]; layman's terms [sperms: unless aimed at a layman audience]; the obvious [The tissues were fixed in Bouin's fixative]; the repetitious [There is binding of different ligands to different receptors in different cell types]; the unnecessary [All the four segments analysed showed high activity].
- not presenting calculations that the reader can easily perform [Frozen semen doses were obtained from six bulls of different breeds, three Taurine and three Zebu. In 1970, ten years after the study began in 1960].
- not requiring the reader to make decisions they are unable to [and/or, either/or, he/she]; the reader should be told whether the slash means or or and, as the meaning of each differs.

The result of incorporating these **ideas** will produce a text that is **clear**, **precise** and **unambiguous**, and that will allow it convey its message upon its first reading.

Subsequent English Corners will be devoted to the detailed grammar of how this can be achieved.