Characteristics of scientific language

Some of the characteristics of scientific language put forward by Eggins and Martin (1997: 231) are, as follows:

(a) use of standard unabbreviated syntax,

(b) lexically dense noun phrase structures with heavy postmodification,

(c) nominalised vocabulary,

(d) use of elevated vocabulary,

(e) sparse and oblique use of attitudinally loaded vocabulary,

(f) use of terms which have specialised technical meanings,

(g) references to scholars without biographical details being presented.

Gutiérrez Rodilla (2005: 22ff) gives a more general listing of features pertaining to the discourse of science:

(a) terminological precision and avoidance of ambiguity,

(b) neutrality: this concerns (1) the manifestation of emotive, evaluative and affective language, (2) the use of evidential strategies to attest for the claims in the argumentation, and (3) the frequent use of impersonal strategies. Impersonality is achieved by means of the following rhetorical and grammatical devices:(i) absence of second person singular structures and rare use of the first person, (ii) use of inclusive 'we' as a marker of modesty, (iii) significant predominance of the third person, (iv) impersonal syntactic structures, (v) use of the passive voice.

(c) economy: this aspect refers to the absence of wordiness, avoidance of syntactic complexity, and the clipping of lexical terms and the use of acronyms. Economy and ambiguity are mutually exclusive concepts in scientific language, and so economy cannot be achieved at the expense of a lack of expositive or argumentative clarity.

(d) lexical and visual resources: lexical technicalities, symbols, abbreviations, and codes based on existing fields of knowledge (Maths, Physics, Chemistry, Computing, etc).