

## CHAPTER SIX

### CONCLUSION

This study has attempted to show that an explication of a text for its lexical cohesive properties reveal how lexis is organised in the text and how semantic continuity is maintained in the text. This expresses the Hallidayan concept which posits that the lexical organisation of the text is manifested in the distribution of lexis along the dualistic syntagmatic and paradigmatic contexts. The analyses which are systemic representations make explicit the kind of cohesive devices employed to relate one lexical item to another. They show how lexical items depend retrospectively on preceding ones for the interpretation of their meanings and are in turn themselves depended upon by succeeding ones.

The value of this exploration is that it shows that Martin's (1981,1989 & 1992) framework whose principles are consistent with Hallidayan theory was applicable to the description of the chemistry text. It also substantiates the validity of the arguments in a Firth-Halliday-Martin line of development in semantic relations that only a

contextual study of meaning is a fruitful linguistic description. A further stage in the study shows that chemistry concepts may be captured in system networks which display lexical items as interconnected classification-subclassification networks. The system networks complement the taxonomic analyses in showing which lexical items have been selected as features and which have been realised as options and how they may be interrelated.

The results of my findings may be used to further our understanding of how lexical items cohere in chemistry texts and how system networks may be usefully employed to represent the lexis of chemistry. Research findings show that second language learners of English because of not having been sufficiently exposed to the linguistic, rhetorical and conceptual features of scientific texts, find reading and understanding them enormously difficult (Wiriyachitra 1982 and Walsh 1982). Therefore this study finds its application in the field of ESP, which has as one of its pedagogic aims, helping second language learners of English overcome difficulties in understanding specialist subjects in English and equipping them with learning and study skills. Learners may be oriented to see connections between message parts through the organisation of lexis and this alerts them about the cohesive devices which may not always be explicitly stated in the text. Learners are taught to supply these

devices for themselves and are also made aware of how the text stays on topic and does not digress. An analysis of lexis may render a scientific text less complicated than it is usually perceived as. The insights gained from this analysis, in terms of lexical organisation and conceptual knowledge represented in system networks, may enable language teachers working closely with subject specialist teachers, prepare relevant teaching materials for the ESP classroom. Such materials may help learners extract information and understand concepts in a meaningful way. As Halliday and Martin (1993 : 124) have expressed, "we need to understand how the language of these texts (scientific texts) are organized," in order for us to help our learners find the task of reading scientific texts less daunting.

However, this thesis has done no more than show what semantic relations exist between lexical items and how concepts may be represented systemically using a Hallidayan system-structure theory. It is merely one stage in a continuing investigation of systemic-semantic relations. In order to be able to make more general statements concerning the features of chemistry lexis, more texts may be investigated, preferably with the aid of the computer. A further line of enquiry may be to compare texts of other scientific disciplines such as physics, biology or geology for their lexical organisation or to

compare different parts of a scientific article such as between the introduction and the findings in terms of its lexical features.

The study may also be extended to involve learners as this may reveal why some texts are more appealing and successfully read than others. This may include an analysis of the interpersonal lexis, besides the ideational and textual lexis and such a study may entail the engagement of a group of informants so that the connotative meanings may be explored.

Since this research was primarily concerned with the paradigmatic description of lexical relations, greater weight was given to the description of the system than to the structure. Another interesting area of investigation may be in analysing the lexicogrammatical stratum of the text for its collocational potential so that collocation sets may be compiled. For example, in chemistry we often come across the expressions such as “mass of a sample” or “mass of a substance,” “mass of an electron,” “mass of a particle” or “mass of fundamental particles.” Learners may be taught ways to make predictions in text by familiarizing them with collocations. The ability to make predictions and to anticipate information is a valuable strategy a learner may employ in reading efficiently.

This chapter has served to encapsulate the ideas of the entire thesis. The claims made in this thesis are open to verification and

refutation by others working in this field. Views which complement or contradict these claims in one way or another enrich systemic-semantic explorations with significant theoretical and pedagogical implications.