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LEXICAL COHESION IN CHEMISTRY TEXTS: AN EXPLORATION INTO SYSTEMIC - SEMANTIC RELATIONS

CLOSED STACKS

BY

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ABSTRACT

The present study of a content analysis of chemistry texts is based on Halliday's theoretical position of viewing lexis as a linguistic level distinct from grammar. The principles underlying the study of lexis are consistent with a Firth-Halliday-Martin line of development in semantic relations. The study has aspired to analyse the lexis of two chemistry chapters extracted from two different general chemistry textbooks. Specifically, it has investigated how the text employs the resources of lexical cohesion to create meaning. The lexical analyses illustrate how the lexis of the texts are organised and how semantic continuity is maintained throughout the texts. These lexical analyses lead to the development of system networks which capture chemistry knowledge in a holistic subclassification and crossclassification manner. The networks embody features and options derived from a deeper level of analysis of the cohering lexical items of the texts. The findings suggest that the application of a Hallidayan model of language to explicate the text for its semantic relations is well substantiated. The findings also indicate that a system-structure theory of language which analyses lexis distributed along the syntagmatic and paradigmatic contexts of the text unravels the text as a semantic entity. The realm of scientific texts was investigated in the interest of shedding some light on the organisation of lexis. The insights gained from this study may help learners of English as a second language, specialising in a scientific discipline at the tertiary level, to interpret the texts of their subject specialisations more readily.

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