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The Lexical Phrases in Selected Articles
of Scientific Journals

A Thesis

Presented to

The Faculty of the Languages Department
Graduate Program

De La Salle University

In Partial Fulfillment
of the Requirements for the Degree in
Master of Arts in Language and Literature
English for Specific Purposes

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September 1991

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ABSTRACT

The questions "How helpful can the knowledge of lexical phrases in scientific articles be with ESL students?" and "What role do lexical phrases play in the occurrence of general discourse moves in scientific articles?" were considered the general problems of this study. To meet these problems, the following objectives were adopted: 1) to list the global and local macro-organizers in selected American-or British- and Philippine-published scientific articles; 2) to categorize the global and local macro-organizers according to structure and function; and 3) to determine various general moves that are either accompanied or not accompanied by the global macro-organizers. The study hypothesized that 1) global and local macro-organizers occur more often in Philippine-published articles than in American-or British-published articles; 2) global and local macro-organizers function largely as topic shifters and relators, respectively, and come out most often with implicit structures; and 3) global macro-organizers do not signal the occurrence of general discourse moves in scientific articles.

In this investigation, 26 randomly chosen and unre-



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printed scientific articles were used as primary materials, 13 of them published in American and British journals and the other 13 articles published in Philippine journals.

These articles were dated 1986-1990, and taken from the field of "Pure" Science, i.e., either Chemistry, Biology (Zoology, Botany, Entomology, Ecology), or Physics. To help visualize the direction and explain the results, the study used the following theoretical references: 1) the list of functions of the lexical phrases suggested by De Carrico and Nattinger (1988); 2) the list of moves given by Hopkins and Dudley-Evans (1988); 3) the list of meaning relationships presented by Jones and Faulkner as stated in Horn (1975); 4) the list of signal words presented by Durkin (1983) as quoted in Devine (1984); and 5) the list of rhetorical types given by Decker (1978). Largely adopted as the simple statistical tool in the data analysis was the frequency counting of the global and local macro-organizers, their functions, structures, moves (whether signalled or not signalled by the global macro-organizers), and the minor transitions brought by the local macro-organizers.

Final results showed that the nine most common major moves in American-and British-published articles were, in



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order of frequency, the following: 1) Background Information, 2) Statement or Discussion of Previous Results, 3) Justification of the Recommendation, 4) Generalization, 5) Recommendation of a Solution to a Prevailing Problem or of a Direction for Future Action, 6) Discussion of Procedures, 7) Discussion of Results, 8) Recommendation of a Solution to Unsatisfactory Results, and 9) Reference to or Discussion of Previous Related Researches. The eight most common major moves in Philippine-published articles were, in order of frequency, as follows: 1) Background Information, 2) Discussion of Results, 3) Discussion of Procedures, 4) Presentation or Discussion of Materials, 5) Generalization, 6) Reference to or Discussion of Materials, 7) Setting of Scope, and 8) Recommendation of a Solution to a Prevailing Problem or of a Direction for Future Action. The following minor moves were found dominant in the articles analyzed, as follows: 1) research-related transitions, 2) time-related transitions, 3) space-related transitions, 4) quantity-related transitions, 5) modal transitions, and 6) case in point transitions.

More results showed that global macro-organizers occurred more often in American-and British-published ar-



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ticles than in Philippine-published articles. Local macro-organizers, however, occurred more frequently in Philippine-published articles than in American-and British-published articles. Global and local macro-organizers were generally more implicit than explicit in structure and occurred largely as Topic Shifters (global function) and Relators (local function). Lastly, global macro-organizers did not signal the occurrence of general discourse moves.

In conclusion, global macro-organizers have a little role to play in signalling the occurrence of general discourse moves. Nevertheless, knowledge of lexical phrases in scientific articles is, in general, very helpful with ESL students in their reading and understanding of scientific texts.