David G. Hays, 66, a Developer Of Language Study by Computer

By WOLFGANG SAXON

David G. Hays, a social scientist and early practitioner of the budding discipline of computational linguistics, died on Wednesday at White Plains Hospital. He was 66 and lived in the Inwood section of Manhattan.

The cause was lung cancer, his family said.

Computer-aided linguistics -- akin to artificial intelligence -- uses computational procedures called algorithms, mathematical models and computer systems in researching language. It is applied in translation, documentation and lexicography and in the study of stylistics and content analysis.

Early in his career, Dr. Hays taught at the Rand Corporation in Santa Monica, Calif., and wrote about computer-assisted language processing as early as 1957. He was project leader on computational linguistics at Rand from 1955 to 1968.

From then until 1980, he was professor of linguistics, computer science, and information and library studies at the State University at Buffalo. He then worked as an independent researcher, writer and consultant in New York City and taught on-line courses at the New School for Social Research.

As a scholarly discipline, computational linguistics has been much refined since the models of the late 1950's. Part of its folklore is an early program that supposedly rendered the English sentence, "The spirit is willing, but the flesh is weak," into Russian as "The vodka is strong, but the meat is rotten."

More recent programs of the kind Dr. Hays worked with are far more discriminating. They feature immense dictionaries and are able to analyze the grammatical structure of sentences and to summarize dense legal documents.

David Glenn Hays was born in Memphis and graduated from Harvard College in 1951. He also received his master's and Ph.D. degrees in sociology from Harvard.

He wrote many scholarly articles and six books, including "Introduction to Computational Linguistics" (Elsevier, 1967) and "Cognitive Structures" (H.R.A.F. Press, 1981).

At his death, he was studying how motion elicits emotion, focusing on the ballets of George Balanchine.

Dr. Hays is survived by his wife, Janet Ginsberg Adelson Hays; a daughter, Dorothy A. Hays of Palo Alto, Calif.; two sons, Warren S. T., of Tokyo, and Thomas G., of San Francisco; a granddaughter; three stepsons, James Adelson of Harvard, Mass., Joshua Adelson of Sharon, Mass., and Andrew Adelson of Newton, Mass.; two stepdaughters, Lisa Eisenberg of Harvard, Mass., and Nancy Allison of Sharon, Mass., and 10 step-grandchildren.