NASA TECH BRIEF

Lyndon B. Johnson Space Center

A Comprehensive Program for Textual Concordances and Statistics

The program is a literary research tool that can provide a concordance and many other textual statistics relating to authorship or the sequence of composition.

The program could be used with machine-readable text. Thus, once machine-readable text becomes available, one could economically maintain a running index of what one has written along with a count of the total number of words. Furthermore, the program may be used to search through machine-readable material to find desired passages or specific subject matter.

For statistical validity, more than usual emphasis is placed on the importance of common words. Because they occur in such large numbers, common words are the most reliable statistical inference of authorship or chronology.

The program uses mechanical text manipulation and has provisions for a wide variety of text formats and conventions (such as upper case). It will not, in general, be necessary to change existing machine-readable text for use with this program, and several different outputs are offered. All data may be obtained through the printer, or the results may be plotted as statistical distribution curves. Furthermore, both tape and cards are available for further machine processing. For example, one may wish to make composite concordances of the one or several writers, or correlations of the statistics of several texts to determine the most probable authorship or sequence of composition.

Notes:
1. Program instructions are given in two parts. The first is a complete users guide, and the second contains a more detailed description of the source programs and definitions of all the program terms.
2. This program is written in FORTRAN H for use on an IBM-360 computer.
3. Inquiries concerning this program may be addressed to:

> COSMIC
> 112 Barrow Hall
> University of Georgia
> Athens, Georgia 30601
> Reference: MSC-17484

Source: L. A. Ule of
Rockwell International Corp.
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