

RESEARCH IN WORD PROCESSING NEWSLETTER

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A Meaning-Based Thesaurus from Old English to the Present

A computer research project at Glasgow University is developing the *Historical Thesaurus of English*, the first such effort for any language. Like the familiar *Roget's Thesaurus*, it will arrange words semantically rather than alphabetically. But the historical thesaurus will uniquely include most of the English vocabulary from Old English to the present, including obsolete words—and the obsolete meanings of current English. At present, historical dictionaries are arranged alphabetically, not semantically.

Since literary criticism is not fully valid without a period-specific awareness of vocabulary meanings, the value to scholarship is self-evident. The chronological order of word lists will not only reveal the entire range of words ever used for a particular idea or object, but will also show the range of words available to earlier authors for expressing those ideas at any time. The evolution of ideas in a variety of humanities disciplines is expected to benefit from this research tool. Contact Miss Christian Kay, Department of English Language, Glasgow University, Glasgow, Scotland.

American Society for Information Science

In addition to the larger context of computers in the humanities, word-processing applications to writing and literature remain an important emphasis for the American Society for Information Science's Special Interest Group for the Arts and Humanities, including "making concordances, collating texts, discovering verbal correspondences between passages, characterizing styles, (and) machine-editing bibliographies." Those interested in contributing to or receiving a copy of the *SIG/AH Newsletter* should contact Dr. Ralph Dumain, Editor, *SIG/AH Newsletter*, 242 Ashland Avenue, Buffalo, NY 14222.

Software Evaluation Guidelines from NCTE

The NCTE Committee on Instructional Technology is making available a 1984 version of its "Guidelines for Review and Evaluation of English Language Arts Software," a four-page set of guidelines for selecting software to fit lesson objectives and levels of instruction. It includes tips for evaluating software features such as "teacher management, instructional strategy, content, and ease of operation." Despite its K-12 orientation, others might find the standards worth considering. For a free copy, send a stamped, self-addressed envelope to the National Council of Teachers of English, 1111 Kenyon Road, Urbana, IL 61801.

2--Research in Word Processing Newsletter

Call for Papers

November 15, 1984, is the deadline for submitting paper and demonstration abstracts to the International Conference on Computers and the Humanities to be held June 26-28, 1985, at Brigham Young University in Provo, Utah. Papers and demonstrations may deal with the application of computers to any area of the humanities, including word processing, text analysis, and other such applications. Abstracts must include full name, address, telephone number, academic affiliations, and a list of any equipment needed for the presentation. They must be written in English and should not exceed 500 words. The sponsoring Humanities Research Center at Brigham Young has its own IBM 370/138 mainframe computer, numerous micros, several specialized printing devices, and a Kurzweil Optical Scanner—a reading machine equipped with 2,500 pronunciation rules to turn book print into synthesized speech. Contact Randall Jones/ICCH85, Humanities Research Center, 3060 JKHB, Brigham Young University, Provo, Utah 84602.

Electronic Text Consortium Newsletter

A free subscription to the *Electronic Text Consortium Newsletter* is now available. Published bimonthly during the academic year, the newsletter focuses on academic uses of videotex-television and other "rapidly emerging electronic text technologies and their potential applications in higher education." First published in April-May 1984, the newsletter is a product of the Program on Electronic Text for Higher Education, "a complex of research and demonstration activities supported by the Annenberg/CPB Project." Contact: Newsletter, Electronic Text Consortium, Center for Communications, San Diego State University, San Diego, CA 92182.

National Science Foundation Research Awards

Though the National Science Foundation makes no grant awards for curricular initiatives, its Division of Information Science and Technology accepts proposals in three research programs:

- 1) The *Information Science Program* seeks "to increase understanding of the properties and structure of information and information transfer.
- 2) The *Information Technology Program* seeks "to contribute to the store of scientific and technical knowledge which can be applied in the design of information systems."
- 3) The *Information Impact Program* seeks "to improve understanding of the economic and other impacts of information science and technology."

Beyond computer science and information science departments, awards are most common in psychology, sociology, linguistics, and philosophy—including some awards for conferences, publications, and travel to foreign conferences. In general, research approaches should be primarily quantifiable. The computer itself has, however, made quantitative studies far more attractive to humanists in writing and literature programs—and other traditionally "soft" humanities disciplines. Interdisciplinary efforts between, say, English departments and scientific and engineering disciplines are also worth exploring.

Further information about Division programs can be obtained in the *Program Announcement and Summary of Awards: Fiscal Year 1983*. Contact Dr. Caroline Eastman, Director, Division of Information Science and Technology, NSF, Washington, DC 20550.

Research in Word Processing Newsletter--3

Title: "Models of Human Performance Using Text Editors"

Duration: Two-Years

Amount: \$74,506

FY: 1983

Director: John M. Hammer

Place: Georgia Institute of Technology

Summary: "This is an investigation of how human beings use text editors to search for and modify text. When searching for text with an editor, the user is assumed to employ imprecise knowledge of the text across which the editor must be moved. This assumption, applied to several rather different search methods, can yield considerable insight into the behavior of a user searching for text. A second assumption is that when modifying text and when choosing which search method to employ the user chooses the optimal method subject to certain constraints. To construct models of these behaviors, it is necessary first to define the criteria to be optimized. Then one must find constraints such that the models approximate human performance. These constraints can be interpreted as limitations on human information processing."

Example of Funded Information Technology Program

Faculty Position Announcements Welcomed

As a no-charge service, the *Research in Word Processing Newsletter* will publish position openings which invite applications from job-seekers with experience in word-processing applications to academic-writing programs. Send vacancy announcements to the Editors, *Research in Word Processing Newsletter*, South Dakota School of Mines and Technology, Rapid City, SD 57701.

Notice of Vacancy

Texas A&M University has a tenure-track job opening for someone involved in computers and writing, including "technical writing, computers, and empirical research." The nine-month position offers a starting salary of \$21,000, in addition to excellent resources and exciting possibilities for research. Vitae are also encouraged from those with greater research experience who are seeking higher rank and salary. The deadline for applications is November 16, 1984. Contact: Dr. David Stewart, Chairman, Department of English, College of Liberal Arts, Texas A&M University, College Station, TX 77843-4227.

4--Research in Word Processing Newsletter

Database Management for Teachers and Researchers — Part II

Last month we began our series on Database Management (DBM) software, introducing you to the two types of DBMs—file managers and relational database systems. Always keep in mind that your students, too, can benefit from the potentials afforded by DBM systems: in future installments we will explore some of these student-oriented applications of DBM. For now, though, let's begin Part II of "Database Management for Teachers and Researchers" by exploring how the limitations some DBM programs place on the length of information contained within a record's fields can have a significant effect on the program's overall usefulness for the teacher and researcher.

The amount of information which can be entered into a DBM's record field often depends on the primary application for which the software was written. Business-oriented DBMs—which make up the majority of programs currently on the market—frequently set maximum field lengths of between 40 and 255 characters (five to thirty-one words). While this range might seem quite small to academics used to penning protracted annotations in descriptive bibliographies, remember that most business applications in which data must be stored and retrieved use highly specialized, often cryptic alphanumeric and mnemonic codes for such things as part numbers, sales personnel, geographic regions, international distributors, etc.; thus, business has little need for record data fields longer than 255 characters.

Teachers and researchers, on the other hand, think and write in words and sentences—not part numbers—requiring a minimum of 700 to 1,000 characters per field (five to ten sentences).

Unfortunately, most DBM programs that afford users this increased field length exact a price both in terms of the software's increased cost and the additional memory (RAM) the computer needs to operate such a DBM system. Then again, even with enhanced field-length parameters, most software remains number-oriented instead of text-oriented: they can locate only single key words at the beginning of fields instead of being able to locate a word or phrase within a paragraph—or even a grouping of two words!

As you can see, there's a great deal to know about DBM systems before purchasing one. Still, with some advanced planning, a DBM can become the answer to your worst information-retrieval nightmare. Next time, we'll explore the differences between number-oriented and text-oriented DBMs and describe how each can be made to work for you in your teaching and research applications.

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Research in Word Processing Newsletter--5

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6--Research in Word Processing Newsletter

SOFTWARE REVIEW - *SuperWriter*

The newsletter does evaluations of word-processing software to help you discover programs that might fulfill your and your students' writing or research needs. This month, we evaluate *SuperWriter*, a full-featured word-processing program sold by Sorcim/IUS Corporation.

When reviewing a word-processing package, we are not endorsing any product. Rather, we are describing the software's strengths and weaknesses and examining how these features (or lack of them) might affect students and teachers in academic writing situations.

PROGRAM:	<i>SuperWriter</i>
PUBLISHER:	Sorcim/IUS Corporation, Inc.
ADDRESS:	2195 Fortune Dr. San Jose, CA 95131
LIST PRICE:	\$295.00
WILL RUN ON:	CP/M, MS-DOS, and PC-DOS systems
MEMORY (RAM) NEEDED:	64k (CP/M); 96k (MS-/PC-DOS)
DISK DRIVES NEEDED:	two
SPELLING DICTIONARY:	20,000 word, expandable by user
CORRECTION METHOD:	marks words
ON-DISK TUTORIAL:	n/a
QUALITY OF MANUAL:	excellent
EASE OF LEARNING:	moderate
EASE OF USE:	moderate
DISK COPY-PROTECTED:	no

COMPOSITION

FEATURES

FEATURES	YES-NO	COMMENT
Help screens (video tutorials you can call upon while editing or formatting text)	yes	no matter where you are in the program's editing or formatting structure, depressing the CONTROL key [CTRL] and the backslash key [\] together will provide you with currently available program options
Automatic headers (titles)	yes	insertable anywhere within the top and/or bottom margins of a document by using the \HE (for header) or \FO (for footer) embedded commands
Full-screen cursor control (ability to move to any spot on the screen to edit)	yes	you can get around quickly in your document by using various [CTRL] plus alphabetic character-key combinations (e.g., [CTRL] F moves the cursor word by word)
Automatic word wrap (no "Return" or "Enter" required at the end of each typed line)	yes	<i>SuperWriter's</i> wordwrap feature may be toggled off and on by using the command \WRAP Y (on) or \WRAP N (off)
Adjustable left- and right-margin settings (e.g., for indenting extended single-spaced quotations)	yes	the right margin is adjustable to up to 250 columns through the GLOBAL-SETTINGS MENU (see Fig. 1), the SW.DEF user-created default file (see Fig. 2), or by using the \LM embedded command.

8--Research in Word Processing Newsletter

SETTING	FUNCTION	RANGE
LW #	Line width	0-250
TAB #, # ...	Tab settings	1-Line Width
WRAP y/n	Word wrap	
VRET y/n	Visible returns	
VBLNK y/n	Visible blanks	
VBRK y/n	Visible line breaks	
VCTRL y/n	Visible print controls	
VHYPH y/n	Visible soft hyphens	
SOLC #	Screen overlap	0-22 lines
MTA y/n	Menu type-ahead	
BELL y/n	Bell on/off	
DDISK X	Document disk	Drives A through P
INSERT X	Insert mode	I, A, or O
OFF X	Output file format	Regularizes .EXT
TRB y/n	Tabs replace blanks	
LM #	Left margin	0-99 columns
SP #	Line spacing	1-65
PL #	Page size in lines	1-99 lines
TM #	Top margin	0-65 lines
BM #	Bottom margin	0-65 lines
PLW #	Print width	8-250 columns
COPY #	Number of copies	1-999
FORMS X	Continuous or single-sheet	C, S
DRAFT y/n	Draft printer	
PROP y/n	Proportional print	
CPI #	Characters per inch	10, 12, 15
LPI #	Lines per inch	6, 8
BI y/n	Bidirectional printing	
UM b/s	Underling broken/solid	
BFI #	Boldface intensity	1 through 9
CMD X	Embedded formatting char.	replaces \
JUST y/n	Word justification	spaces between
JUSTC y/n	Character justification	spaces between
DICT X	Default user dictionary	
AUTHOR X	Author's name	20 characters
COMMENT X	Comment	24 characters
OPERATOR X	Operator's name	20 characters

Fig. 2: SW.DEF Default Settings

10--Research in Word Processing Newsletter

Document: A: RWPNTST

DOCUMENT COMPOSER 1.02 11:27

Printer: EPSON-MX GRAF
Disk:

Pass 1
Page 1

Record #: 0
Line 1

Start Record #: 0
Stop Record #: Last

Format Settings:

Left Margin (0- 99) is 10
Line Width (1-250) is 65
Spacing (1- 65) is 1
Page Size (1- 99) is 66
Top Margin (0- 65) is 6
Bottom Margin (0- 65) is 6

Control Settings:

Copies (1-999) is 1
Forms (C, S) is C
End Page # (1-999) is 999
Begin Page # (1-999) is 1

Printing Options:

- Format and PRINT document
- Format On-screen
- Change Format settings
- Change Control settings
- Secondary Print functions
- Return to System

Space bar = Move Cursor, CR = Select, ESC = Cancel, ? = AnswerKey

Fig. 3: Print Menu

Document: A: RWPNTST

SuperWriter 1.02 11:30

Workspace contains:
55 Words
279 Characters
5 Lines
1 Pages
(32969 Free)

Output Format: S/Writer
Save History: Yes
Tab Insertion: No

Save your document on disk:

- Save document
- Rename and save document
- Change output format

Space bar = Move Cursor, CR = Select, ESC = Cancel, ? = AnswerKey

Fig. 4: Menu Screen—File

Research in Word Processing Newsletter--11

OTHER FEATURES

SuperWriter has just about everything you could ask for in an advanced word-processing package, and more. Two of the more noteworthy features are the ability of the user to create any number of "default" configuration programs by defining variables in an SW.DEF file (see Fig. 2) and the ability of the program to "remember" a complex series of keystrokes as an .XQT extension file for reuse during an editing session or during a future session (simply recall the .XQT file before entering the *SuperWriter* program: A> SW "Name of .XQT file goes here"). Also, after each document is saved to disk, you are given a display of the number of words, characters, lines, pages, and keystrokes used in the text—as well as the amount of filespace remaining.

PRINTER SUPPORT

The ultimate test of any word-processing program is its ability to support basic and, when applicable, advanced text-formatting features on both letter-quality and dot-matrix printers (more specifically, the printer or printers you either presently own or can afford to purchase). Note that specific model numbers within printer families aren't always listed; therefore, it would be a good idea to try the program out before purchasing it. Here, then, is a list of printers directly supported within *SuperWriter's* "INSTALL" program: **STANDARD** (no underlines), **DRAFT** (with underlines), **NEC SPINWRITER**, **DIABLO**, **SELLUM**, **QUME**, **XEROX**, **EPSON MX80/100**, **EPSON W/GRAFTRAX**, **EPSON RX80**, **EPSON FX80/100**, and **IBM GRAPHICS**.

OVERALL EVALUATION

SuperWriter isn't the easiest to learn word-processing program on the market, but many of the "easy-to-learn" packages fail to deliver features such as variable line spacing within a document, superscripting and subscripting, boilerplating capability, and the like. Since the software is, essentially, menu-driven, there are few wrong turns you could make that aren't easily changed either by the program directly or by you through program prompts. Recommended for high school and beyond, *SuperWriter* combines a versatile text editor with extensive print-formatting options, making it a real contender in the middle-priced range of WP programs.

[ED. NOTE: The categories we include in our software reviews reflect course offerings found in academic settings. If you feel we should add other categories that address common writing initiatives, or if you would like to see more program features included under existing categories, let us know.]

Manuscript Submissions Welcome

The newsletter welcomes from our readers article submissions which pertain to word-processing applications in academic writing. Manuscripts should be OCR readable (Courier, Letter Gothic, or similar letter-quality typefaces) or may be submitted on disk using WordStar or standard ASCII code in IBM-PC DOS (5¼" diskette; 1.1, 2.0, or 2.1) or CPT 8500 (8" disk) formats (direct uploading of articles via modem will be available soon). All manuscripts should include a short autobiographical sketch. The Editors reserve the right to edit articles, if necessary. If you want your manuscript returned, please enclose a stamped, self-addressed envelope with your submission. Address all correspondence to the Editors, *Research in Word Processing Newsletter*, Liberal Arts Department, South Dakota School of Mines and Technology, 500 E. St. Joseph, Rapid City, SD 57701-3995.

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