



University Computer Center Newsletter

FOR COMPUTING IN THE HUMANITIES

UNIVERSITY COMPUTER CENTER

UNIVERSITY OF MINNESOTA-TWIN CITIES

MINNEAPOLIS, MINNESOTA 55455

bulletins

The first fall meeting of the Arts and Humanities User Group (HUG) held Monday October 15, 1979 in 113 Space Science at 3:15 pm. All persons involved or interested in computing for the arts and humanities are urged to Walsh (310 Folwell Hall, 376-2943 or 373-0186) if you have any questions regarding this meeting.

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For help with most computing problems, the best place to start is with the consultants in 140 ExpEng or the other consulting locations on campus. If you can't get to these consultants, you can call the HELP line at 376-5592. For problems or questions you might have other than strictly computational, the persons at the following numbers will be able to help you or at least direct you to someone who can:

HELP-line	376-5592
Computer Aided Instruction	376-2975
Date Base Applications	373-7878
Graphics Software	376-1636
Microcomputers	373-7745
Programming languages	376-7290
TELEPHONE CONSULTING	
Statistical packages	376-5062
System 2000	376-1761

UCC newsletter

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Director: Peter C. Patton
Editor : Vicky Walch

Comments about the content of this newsletter, or suggestions for changes may be directed to the editor, 124 Space Science, 612/376-2943.

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PROJECTS IN ANCIENT STUDIES

This issue of the NEWSLETTER FOR COMPUTING IN THE HUMANITIES will focus on various research projects now underway on topics in ancient studies. Longer reports on several of these projects will be included in a UCC-generated REPORT ON COMPUTING IN THE HUMANITIES AT THE UNIVERSITY OF MINNESOTA which will be available early in 1980.

We will present a short description of some the many projects dealing with problems in ancient history, archaeology and the analysis of ancient texts. Comments and questions on any of these projects may be directed to the authors directly or via the Editor of this Newsletter. Any persons involved in projects utilizing the computer in research on any aspect of ancient studies are encouraged to send a short description of the project to the Editor for inclusion in future issues.

PROJECT: A computer simulation of a Roman wine and oil plantation

PRINCIPAL INVESTIGATOR: Holly J. Morris, CAS
CATO is a computer program that models and simulates the agricultural activities of a Roman plantation system in terms of revenues, expenses and total profit on a yearly basis. The aim of the project is to give a fuller explanation of how the Roman plantation emerged in Italy, using a series of simulations.

PROGRAM: MNF programs

PROJECT: Caesar's army in Gaul

PRINCIPAL INVESTIGATOR: Linda Ricketts, History
A complete prosopography of the individuals who served in Caesar's army in Gaul is being created using Caesar's GALLIC WAR and other classical texts and inscriptions. It is hoped that this study will also reflect the political and social structure in first century B.C. Rome.

PROGRAM: System 2000 data base management system

PROJECT: A computer simulation of the house construction activity system at Nichoria, Greece

PRINCIPAL INVESTIGATOR: Vicky Walsh, Classics
A computer model and simulation of this model are being constructed in terms of decision criteria and energy expended in order to attempt a reconstruction of the house construction system at Nichoria in the Bronze Age in Greece. The aims of the project are to determine the energy required for the construction of the buildings at Nichoria and also the series of decisions that could result in the set of houses as excavated at Nichoria.

PROGRAMS: SIMSCRIPT and FORTRAN routines

PROJECT: A computerized data base for Babylonian legal and economic documents

PRINCIPAL INVESTIGATOR: Richard Ward
UCC Research Fellow

All available cuneiform documents for the Babylonian town of Kutalla have been entered in a data base using a special character set developed for Sumerian. In addition to routines provided by System 2000, SPSS files are created for additional statistical analysis. This project is seen as a first step towards computerizing a large corpus of ancient documents.

PROGRAMS: System 2000, SPSS

PROJECT: Sumerian milling texts

PRINCIPAL INVESTIGATOR: Buzz Brookman, CAS
The ultimate goal of this project is a computer-based analysis of 500-700 UR III economic documents relating to the milling industry of this period. A combination of statistical, modeling and philological methodologies will be implemented on this data base.

PROGRAMS: SIR data base management system

PROJECT: Sumerian lexicon

PRINCIPAL INVESTIGATOR: Steve Sparley, CAS
The twenty-five tablets of the lexical series HAR.RA = hubullu have been entered and are being edited as a text file. A sorting scheme for Sumerian words is currently being established, and Sumerian character output has been finalized for the Lektromedia CRT and the Statos printer/plotter. When completed, this lexicon will be published as part of the MSL series.

PROGRAMS: XEDIT,
special ordering routines,
special plotting routines

PROJECT: Tel Mikhal data base

PRINCIPAL INVESTIGATOR: Debbie Katz, CAS
To facilitate on-site entering of data at the archaeological excavation of Tel Mikhal, Israel, a data base was created using System 2000. This system has been in use on the site in Israel for two seasons. When complete, the data base will be used for data analysis for the publication of the site.

PROGRAM: System 2000 data base management system

PROJECT: Minnesota archaeological data base

PRINCIPAL INVESTIGATOR: Ruth Tate, CAS
The data from a survey of archaeological sites in Minnesota is being entered in a data base as defined by the Principal Investigator. The data base is designed to be used in the field to collect data on archaeological sites and their environments. Once collected, the data can be used for comparative bibliographies and site research.

PROGRAMS: System 2000 data base management system

OBJECT: Analytical concordances for
the New Testament

PRINCIPAL INVESTIGATOR: Tim Friberg, Linguistics
A comprehensive textual analysis of the Greek
New Testament is nearing completion. This
includes the study of Koine Greek grammar and
syntax and various concordances. Printing and
formatting work is also underway and the
results will be published by the Baker Book
House, Grand Rapids, Michigan.

PROGRAMS: GENCORD and FORTRAN routines

OBJECT: Septuagint concordances and lexica

PRINCIPAL INVESTIGATOR: Ray Martin
Wartburg Seminary
Dubuque, Iowa

The current project consists of syntactical
and critical concordances to the texts of RUTH
and DANIEL and descriptive lexica with context
of the texts of BARUCH, RUTH, DANIEL and the
EPISTLE of JEREMIAH (to be published in the
COMPUTER BIBLE). The ultimate goal is such
concordances of each book of the Greek Old
Testament.

PROGRAMS: TAGEDIT

OBJECT: Study of Rabbinic literature

PRINCIPAL INVESTIGATOR: Tzvee Zahavy,
Ancient Near Eastern and
Jewish Studies

This computer assisted study of portions of
the MISHNAH, the earliest Rabbinic documents
(ca 300 CE), consists of four parts. The
first involves converting the data to machine
readable form. The second is the creation of
concordances for statistical analysis, and the
third consists of linguistic analysis using
TAGEDIT. The last stage combines the
methodologies of parts two and three for a
final analysis.

PROGRAMS: TAGEDIT

PROJECT: Graphemic analysis of language families

PRINCIPAL INVESTIGATOR: Nicki Harper, History
Tom Rindflesch,
Linguistics

This project analyzed the patterns of
graphemic frequency distributions of various
languages to test if one could predict the
genetic relationships of languages from
graphemes only. The ultimate goal would be to
be able to classify an undeciphered language,
such as Linear A, into some language family
without actually transliterating the script.

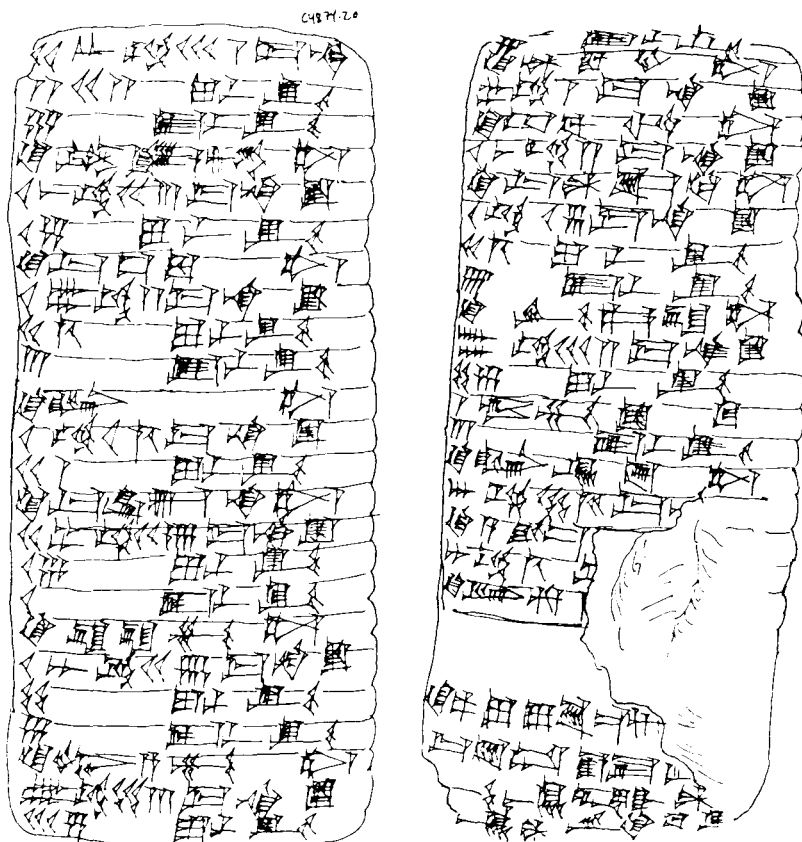
PROGRAMS: Pascal programs

PROJECT: Textual analysis of HOMER

PRINCIPAL INVESTIGATOR: Steve Nimis,
Comparative Literature

This projects involves the analysis of the
Greek texts of Homer in order to arrive at a
more comprehensive understanding of the
grammar and language of the ILIAD and the
ODYSSEY.

PROGRAMS: XEDIT, TAGEDIT



DATA BASE SEARCHES

There are a number of data bases relating to Humanities research that can be searched via the computer by the University library staff. Costs vary according to computer time and citation prints required: a typical search would be in the \$10-15 range. For more information, call Dennis Lien at 376-2550 (Reference Divison, Wilson Library).

AMERICA: HISTORY AND LIFE (1964-date)

ART BIBLIOGRAPHIES MODERN (1974-date)

HISTORICAL ABSTRACTS (1973-date)

LANGUAGE AND LANGUAGE BEHAVIOR ABSTRACTS
(1973-date)

MLA BIBLIOGRAPHY (1976-date)

PHILOSOPHER'S INDEX (1940-date)

RILM (REPertoire INTERNATIONAL DE LITTERATURE
MUSICALE) (1972-1975; will soon be expanded to
cover 1967-date)

COMPREHENSIVE DISSERTATION INDEX (1861-date;
covers all US and most Canadian dissertations
including those not in DISSERTATION ABSTRACTS)

Please inquire for other interdisciplinary bases
in social sciences and current events.

SHORT COURSES

Every quarter UCC offers a variety of free short courses on all aspects of computing. Many of these are of interest to Humanities users and we urge you to check the UCC Newsletter and the Minnesota DAILY for specifics. Of special importance is the September 1979 UCC Newsletter which outlines the course sequence for seven computing areas including text processing, data base management systems and graphics. Included in this article is a description of each course and a fall quarter schedule. WRITEUP(CLASSES) also contains the most recent short course information.

DON'T MISS IT!!!!!!!

CONSULTING

UCC maintains a regular consulting schedule for help with computing problems. The consulting schedule is posted outside 140 ExpEng. Note those consultants who have a K, D or X behind their names to indicate Humanities, Art packages, and text formating experience. WRITEUP(CONSULT) and WRITEUP(CONSKED) will give you this information also.

XEDIT INSTANT

There is now a handy XEDIT INSTANT that lists all XEDIT commands with a brief description. This short publication is put out by UCC and can be obtained in 140 ExpEng. A most useful document for XEDIT users!

RETURN TO:

User Services
University Computer Center
227 Experimental Engineering
University of Minnesota
208 Union Street SE
Minneapolis, Minnesota 55455