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NATIONAL CONFERENCE ON THE USE OF ON-LINE COMPUTERS IN PSYCHOLOGY

Sixth Annual Meeting

November 10, 1976

THIRD LEVEL - BUSCH MEMORIAL CENTER

8:00 - 8:45 a.m.

CONFERENCE REGISTRATION

All those attending the conference must register upon arrival. Please wear your registration badge at all times.

	FEE2	
	Members	Nonmembers
Nonstudent	\$2.00	\$6.00
Student	\$1.00	\$3.00

N.B. Add \$2.00 to these fees for registration after November 1, 1976.

8:30 a.m. - 5:30 p.m. EXHIBITS OPEN

Be sure to visit the exhibits and displays. The exhibit fees help make these conferences possible. The exhibitors are interested in your comments regarding their products and in turn provide you with an opportunity to see and discuss the latest hardware and software developments in on-line computing.

8:30 a.m.

COFFEE AND DONUTS

Morning Schedule

SESQUICENTENNIAL ROOM

8:45 - 9:00 a.m.

SESSION I

OPENING REMARKS

Welcoming Remarks: Daniel C. O'Connell, President,

St. Louis University

Announcements: N. John Castellan, Jr., Indiana University

SESSION II INVITED ADDRESSES

Presider: Richard Millward, Brown University

9:00 - 9:50 a.m. The Role of Psychological Models in Computer-Assisted Instruction - Patrick Suppes, Stanford University

The use of psychological models in computerassisted instruction is reviewed and a contrast is drawn between micro models and global models. The possibility of using global models for predictive purposes in the future is emphasized. The talk concludes with some suggestions for a deeper use of micro processing models. Examples and data are drawn from work of the past decade in the Institute for Mathematical Studies in the Social Sciences at Stanford.

10:00 - 10:50 a.m. The Use of Computer-Generated Synthetic Speech in the Study of Speech Production and Perception - Dennis H. Klatt, Massachusetts Institute of Technology

A speech-synthesis-by-rule program can be thought of as a functional model of human sentence production. The computer program that will be described and demonstrated is intended to provide an objective test of the adequacy of current linguistic and acoustic/perceptual descriptions of English.

11:00 - 11:15 a.m.

COFFEE BREAK

11:20 a.m. - 12:10 p.m. SESSION III PRESIDENTIAL ADDRESS

Presider: Peter G. Polson, University of Colorado

Maximizing the Mini-Uses of On-Line Computers -Lee W. Gregg, Carnegie-Mellon University

Since many behavioral and biomedical scientists are still just entering the field of on-line computer applications, this paper will draw on our experiences to provide a decision framework for the acquisition of computer systems for laboratory applications. Also recommended will be ways of creating an effective operating environment that can handle changing needs. Systems developed for our most recent research in eyemovement recording and children's concept learning using the TURTLE will illustrate the design principles for hardware and software components of mini-computer systems.

Sesquicentennial Room

12:15 - 1:15 p.m.	LUNCHEON	Sesquicentennial Room
	Afternoon Sch	edule
1:30 - 3:15 p.m.	SESSION IV SESSION V SESSION VI	Sesquicentennial Room United States Room Room 201
3:15 - 3:45 p.m.	COFFEE BREAK	
3:45 - 5:00 p.m.	SESSION VIII SESSION IX	Sesquicentennial Room United States Room Room 201
5:00 - 5:30 p.m.	BUSINESS MEETING	Sesquicentennial Room
5:30 - 6:30 p.m.	CASH BAR	President's Dining Room

DINNER

6:30 - 7:30 p.m.

SESQUICENTENNIAL ROOM

SESSION IV GENERAL TUTORIALS

Presider: B. J. Starr, Howard University

1:30 p.m. Distributed Computing in Psychology: A Tutorial - C. B.

Gillman, University of Wisconsin

2:15 p.m. SKED Slide Show: An Introductory Overview -- K. R. Stephens

and F. P. Van Haaren, Western Michigan University

3:15 - 3:45 p.m. COFFEE BREAK

3:45 - 5:00 p.m. SESSION VII COMPUTER-BASED TESTING AND

MEASUREMENT

Presider: Joseph L. Zinnes, Indiana University

The Effects of Computerized Experimentation on Response Variance - V. Rezmovic, Northwestern University

Procedures for Computerized Testing - M. D. Reckase, University of Missouri, Columbia

Description of Components of Tailored Testing - W. M. Patience, University of Missouri, Columbia

Application of Tailored Testing to Achievement Measurement - R. A. English, University of Missouri, Columbia

UNITED STATES ROOM

1:30 - 3:15 p.m.

SESSION V SYMPOSIUM: COLLABORATION ON COMPUTER MODELLING VIA COMPUTER CONFERENCING

Presider and Discussant: Dana B. Main, West Virginia College of Graduate Studies

An Overview of the Development of Computer Modelling for Instructional and Research Purposes - F. Ruggiero, Augustana College

Using Computer Conferencing to Formulate a Simulation Model of the Transitivity of Choice Processes – E. Thorson, Denison University and T. F. Buss, Ohio State University

Report of a Collaborative Effort to Formulate a Simulation Model – P. Spelt, Wabash College

PLANIT: Computer Conferencing System and Its Evaluation – J. Ferguson, Lilly Endowment and R. Johansen, Research Institute for the Future

Computer Facilitation of Communication within Professional Communities Using CONFER - K. Zinn, University of Michigan

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SESSION VIII HARDWARE AND SOFTWARE

Presider: Peter G. Polson, University of Colorado

Computer Automation of Biofeedback Training - A. T. Pope and C. D. Gersten, V.A. Hospital, Montrose, N.Y.

Speech Synthesis: A Unified System for Presenting Acoustic Stimuli - C. B. Gillman, D. L. Wilson, P. A. Morse, and R. D. Kent, University of Wisconsin

Minicomputer Presentation of Speech Stimuli - J. L. Knight, Jr., Purdue University

Timesharing on the PDP-11 under RT-11 - K. W. Scholz, Medical College of Pennsylvania

Clock-Driven FORTRAN Task Scheduling in a Multi-Programming Environment - H. L. Kaplan, Addiction Research Foundation of Ontario

ROOM 201

1:30 - 3:15 p.m.

SESSION VI ON-LINE ASSESSMENT AND EVALUATION

Presider: T. A. Williams, Salt Lake V.A. Hospital

The following papers are jointly authored by Giannetti, Johnson, Hanson, Klingler, Miller, and Williams of the University of Utah College of Medicine and Salt Lake V.A. Hospital. Only the author reading the paper is listed after each title.

Process Evaluation of an On-Line Computer-Assisted Unit for Intake Assessment of Mental Health Patients - D. E. Klingler

Design for an On-Line Computerized System for MMPI Interpretations – D. A. Miller

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SESSION IX RESEARCH AND INSTRUCTIONAL APPLICATIONS

Presider: S. E. Edgell, University of Louisville

An On-Line Laboratory for Teaching and Research - A. H. Lesgold and R. Fitzhugh, University of Pittsburgh

ALL: Automated Learning Laboratory - B. J. Starr and S. A. Flanik, Howard University

Monte Carlo Simulations and the Chi-Square Test of Independence - D. R. Bradley and S. Cutcomb, Bates College

The Community Mental Health Center Management Game: Teaching Administrative Skills by Means of Computer Simulation - C. E. Hallenbeck, R. B. Gallaher, and J. Q. Warren, University of Kansas

Evening Schedule

MEETINGS OF SPECIAL INTEREST GROUPS

8:00 - 10:00 p.m. SESSION X SKED SYMPOSIUM Sesquicentennial Room

Presider: Arthur G. Snapper, Western Michigan University

SKED consists of a set of systems for the PDP-8 computer for controlling behavioral experiments and for data acquisition. All SKED systems are based on the state notation of behavioral procedures. The state notational language has proved to be a powerful language, general enough to be useful for investigations involving a wide range of behavioral experiments. The symposium will describe new hardware for connecting the computer to various laboratory instruments and new applications of SKED in instruction and experimentation.

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- Time-of-Day Clocks and SKED: Techniques and Applications T. F. Elsmore, Walter Reed Army Institute of Research
- Deep SKED G. Inglis, University of Rochester
- The Use of Variables of State Notation: Some Proposed Changes A. G. Snapper, Western Michigan University

8:00 - 10:00 p.m. SESSION XI DECSIG (United States Room)

Presider: Doris Aaronson, New York University

The Digital Equipment Corporation Special Interest Group (DECSIG) will discuss matters of common interest dealing with hardware and software. In particular, new products of special interest to psychologists will be described.

8:00 - 10:00 p.m. SESSION XII DATA GENERAL AND OTHER SYSTEMS (Room 201)

This is a general meeting for users of non-DEC systems. The organization of the meeting is open and the formation of Special Interest Groups representing different systems will be facilitated.

DIRECTORY

Exhibits and Displays President's Dining Room Registration Area Sesquicentennial Room United States Room Room 201 Third Level Second Level Third Level Third Level Third Level Second Level

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President-Elect
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Secretary-Treasurer Program Chairman

N. John Castellan, Jr., Indiana University

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1976-1979

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George Potts, Denver University

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John Klingler, University of Utah
Richard E. Lehman, Franklin & Marshall College
Geoffrey Loftus, University of Washington
Arthur G. Snapper, Western Michigan University
B. James Starr, Howard University

LOCAL ARRANGEMENTS COMMITTEE

D. Gene Davenport, St. Louis University Donald Tepas, St. Louis University

EXHIBITS AND DISPLAYS

(as of September 10, 1976)

COULBOURN INSTRUMENTS, INC.

Box 2551, LeHigh Valley, Pa. 18100

"Solid state modules for analog signal recording."

DATA GENERAL

Southboro, Mass. 01772

"Digital computers for multiprogramming and on-line recording."

DIGITAL EQUIPMENT CORPORATION

146 Main Street, Maynard, Mass. 01754

"Digital computer systems for the psychology laboratory."

GENRAD-ENVIROMETRIC DIVISION (Formerly Grason-Stadler)

P.O. Box 27, Route 117, Bolton, Mass 01740

"SCAT software and hardware systems for experimental control and data acquisition."

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NEWMAN COMPUTER EXCHANGE, INC.

1250 North Main, Ann Arbor, Michigan 48103

"Used mini computers and peripherals."

POLYTRONICS

Methodist Hill, Lebanon, N.H. 03766

"Universal response timers for time-sharing computers."

PROFESSIONAL DATA SERVICES, INC.

Chicago, Illinois

"Computer systems for behavioral, biomedical, and business use."

STATE SYSTEMS

P.O. Box 2215, Kalamazoo, Michigan 49001

"Interface for SKED systems."

WHITTAKER CORPORATION (Space Science Division)

335 Bear Hill Road, Waltham, Mass. 02154

"Eye view monitor and TV pupillometer system."

NATIONAL CONFERENCE on the use of on-line computers in psychology

SIXTH ANNUAL MEETING

NOVEMBER 10 1976 ST. LOUIS MISSOURI

the day before the PSYCHONOMIC SOCIETY meeting

ST. LOUIS UNIVERSITY
Busch Memorial Center
20 North Grant Boulevard
St. Louis, Missouri

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LUNCHEON

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	SESSION V	United States Room
	SESSION VI	Room 201
3:15 - 3:45 p.m.	COFFEE BREAK	
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Third Level
Third Level
Third Level
Second Level

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