Past, present, and future of the Society for Computers in Psychology

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Thank you, Doris, for a memorable introduction. It is difficult to believe everything that you have said, but I'll check it all when I return to Florida, and if it is true, I still won't believe it. Except for Copernicus, little Polish boys seldom warrant or receive that sort of an introduction.

SOME HISTORY

As we enter the next decade, I believe it is important that the Society for Computers in Psychology (S.C.I.P.) develop a little sense of history. So I would like to cover some years of the organization's development and, in the process, cite several highlights that are worthy of note.

First, no one associated with this organization set out specifically to start or found such a group. In 1971, Donald Tepas, then at St. Louis University, contacted the National Science Foundation's Office of Computing Activities with a request for support in developing an interactive system for searches. The NSF representative, a nonpsychologist academician on leave from the Illinois Institute of Technology, suggested that instead of developing the system requested, Tepas should look into the possibility of arranging a conference and subsequently publishing the proceedings. In pursuit of that suggestion, Don contacted me, and after some discussion I agreed to publish the first Conference Proceedings as a special issue of the journal *Behavior Research Methods & Instruments (BRMI)*. Neither of us could predict, with any degree of certainty, whether or not there would be a second such publication; the initial NSF support was limited to the first conference.

After a steering committee was chosen, the first meeting of the group was held in St. Louis. It led to discussions of many matters, including that of a name. In fact, the name was discussed just about every year until the present one, Society for Computers in Psychology, was adopted about a decade later (1982).

The first meeting of the National Conference on the Use of On-line Computers in Psychology (abbreviated NCUOLCP!) was held on November 10, 1971, on the campus of St. Louis University. The meeting was arranged to be held the day before the Psychonomic Society meeting, in the same city, in order to draw some of its members to the Conference. And it did.

The morning session consisted of three invited addresses, and the hall was crowded. Some of the attendees were sophisticated computer users, and some wanted to

learn about the systems. One thing they all had in common was curiosity.

The three initial invited addresses were, in order:

1. "Use of Time-Shared Terminals in Psychology," by Bert Green, Johns Hopkins University.
2. "Misuse, Abuse, and Unuse of On-Line Computer Facilities," by William Uttal, University of Michigan.
3. "Various Uses of Minicomputers in Psychology," by Joseph Sidowski, University of South Florida.

Twenty-seven manuscripts were subsequently published in *BRMI* in a dedicated Proceedings issue four months after the meeting.

The interest shown in the meetings and the results of a Tepas survey led to a decision to request support for a second conference. The second one-day meeting was supported by Grant GB-35611 from the Psychobiology Program in the Division of Biological and Medical Sciences of the National Science Foundation, and was again held at St. Louis University. It consisted of three invited addresses (by B. Weiss, D. Norman, and M. Pilla), three symposia, six paper sessions, and a tutorial on digital filtering and processing. A Conference President was named (Donald I. Tepas), and the Steering Committee announced plans for a third meeting in 1973 and for the establishment of a permanent Conference with membership open to all interested professionals. Conference members were invited to play an active role in determining future activities, Steering Committee membership, and Conference officers. In addition, all persons attending the Second National Conference received a free copy of the printed Proceedings, which made up the entire (189 pages) March 1973 issue of *BRMI*; with it, an application for yearly membership was distributed, along with a statement by the President, Donald Tepas. To date, the Conference Proceedings have continued to be published in the same general format.

The first Presidential Address was given by Tepas in 1973 and was entitled "Computer Analysis of the Electroencephalogram: Evolving, Promoting, and Provoking."

The Presidents of this Society through 1989 were:

Year	President
1972-73	Donald Tepas
1974	William Uttal
1975	Joseph Sidowski

1976	Lee Gregg
1977	Peter Polson
1978	Richard Millward
1979	Daniel Bailey
1980	N. John Castellan, Jr.
1981	John Cotton
1982	Russell Church
1983	Alan Lesgold
1984	Geoffrey Loftus
1985	Dominic Massaro
1986	Walter Schneider
1987	Cynthia Null
1988	Earl Hunt
1989	Cynthia McDaniel

Six Secretary/Treasurers have served nobly over the years 1974–1989: Richard Millward, Daniel Klinger, Cynthia Null, David Eckerman, Jonathan Vaughn, and currently Paula Goolkasian. Cynthia Null served in the position for nearly half of those years.

The Steering Committee that first met at St. Louis University was formed to guide the development of the Society and to oversee the annual meetings. Charter members of that committee were: Daniel Bailey, Edward Carterette, Frank Goode, Bert Green, Richard Millward, William Siegel, Joseph Sidowski, Donald Tepas, and William Uttal. (Over the years, a number of other psychologists have served on the Steering Committee. I apologize for not having the time to mention them all.)

Chairpersons and members of the separate Program Committees have handled the annual task of arranging the paper sessions and symposia. It is their efforts that have made and continue to make the yearly one-day gatherings so successful. As the Society moved its meetings around the country, as a result of the Psychonomic Society's decision to stop meeting in St. Louis, it became necessary to find individuals in particular locales to take responsibility for making local arrangements. Although difficulties were occasionally encountered, all of our yearly meetings were arranged very well. For a period of time, there were also Exhibits Chairpersons.

OBSERVATIONS (1971–1989)

As I look back over the years, my votes for the two most interesting meetings of this Society go to the 1971 gathering in St. Louis and the 1975 assembly in Boulder, Colorado. The first meeting obviously was of historical importance. Its success, along with a survey of attendees, led to the decision to hold more meetings and, in the process, to stimulate interest in computers among the uninitiated and to provide a forum of exchange for users. (Some of the activities at that meeting were noted earlier.)

The assembly held in 1975 at the University of Colorado was a great professional experience. Peter Polson and Daniel Bailey handled local arrangements and did a splendid job. (In fact, it was so splendid that it depleted the Society treasury!) More importantly, and perhaps because

of the location (the Psychonomic Society met in Denver the day after the computer group meeting), the program was outstanding. The number of presentations increased from the previous year's gathering of 29 in Boston to approximately 49 (that figure still remains a Conference high). And the group of contributors was impressive. The one-day Conference was composed of 13 sessions. Two morning sessions consisted of major addresses: C. Leventhal, of Columbia University, spoke on "Three-Dimensional Reconstruction of Identified Nerves in Genetically Identical Animals," and Seymour Papert, of MIT, spoke on "Constructing Cognitive Environments." Both were excellent, and the attendance was impressive. The third talk was by J. B. Sidowski and was entitled "On-Line Instrumentation in Psychology: Dildo or the Real Thing?"—a funny title. The afternoon and evening sessions were dedicated to symposia, contributed papers, and two users' group meetings. A symposium on federal grants was informative and very well attended. Two of the participants were Fred Stollnitz (NSF) and Joseph Young (ONR at that time), both of whom have been closely associated with the meetings of this Society. James H. Johnson and his associates contributed six papers covering on-line psychological assessment. Those papers, along with others presented by the same group at other Society meetings, were and continue to be widely cited in the mental health care delivery literature, and have historical significance in that area. Other contributors in the various sessions included: Doris Aaronson ("The Impact of Computers on Cognitive Psychology"), David Kieras ("Staff Programmer vs. System: The Issues"), Dominic Massaro ("Real-Time Speech Synthesis"), and George Sperling ("Movement Perception in Computer Driven Visual Displays"), as well as three of the Society's Presidents, N. John Castellan, Jr., Lee Gregg, and Richard Millward.

The 1977 meeting held at Catholic University, Washington, D.C., was important because a number of the presentations reflected the influence that microprocessors and microcomputers were beginning to have on psychological research. Peter Polson's Presidential Address was entitled "Microprocessors: Their Impact on Real-Time Computing in Psychology." A Microprocessor Users' Group session had presentations on the KIM-1 microprocessor interface for abusive conditioning (D. M. Murray et al.), evaluations of a microcomputer terminal (L. R. McKnight et al.), inexpensive microcomputers for research (H. Durrett), and a microprocessor reaction time laboratory (J. Santa et al.). Also, in a symposium on "Microprocessors in Psychology," the topics included a definition of microprocessors (M. Pavel), the selection of a low-cost microcomputer network (E. Brown et al.), input and output for microprocessors (S. Goldband), and a multiuser on-line microcomputer system (E. Crossman et al.).

The meetings of S.C.I.P. have generated over 650 publications in the journal *Behavior Research Methods, Instruments, & Computers (BRMIC)*, and have contributed

significantly to the generation of research published in other journals and books. Citations of publications appearing in the Annual Proceedings (*BRMIC*) were sparse during the early years of this organization, but are now common not only in psychological publications, but also in the printings of other disciplines.

Over these many years, I have also been impressed with the caliber of the invited addresses. Several of these have already been noted. But a sample of some of the names of other presenters is worth noting: Michael Posner, Allen Newell, Patrick Suppes, Donald Norman, Bernard Weiss, Roger Schank, Duane Rumbaugh, Robert Neches, Douglas Hintzman, Brian Wandell, and John R. Anderson. It is unfortunate that invited addresses have not received the attention they have deserved over the past seven years or so.

It is difficult to recall many negative experiences. An apparently diminishing interest in pursuing quality invited speakers has already been mentioned. Indeed, I believe that for five of the years from 1982 through 1988, no invited speakers appeared before the Society, although Presidential Addresses were given annually.

Just as life goes on, so does death. Unfortunately, several of our members have died. Three were known to me personally, and the fourth I wish I had known better: *Lee Gregg*, of Carnegie-Mellon University, and *Richard Millward*, of Brown University, were close professional friends. Both served as President of the National On-Line Computer Conference, in 1976 and 1978, respectively, and both contributed greatly to the organization over many years; Millward also served as Secretary-Treasurer. *Frank Restle*, of Indiana University, was also involved in the Society's early affairs, and was named to the Steering Committee in 1974 (along with D. Bailey, N. J. Castellan, P. Polson, and G. Sperling). And finally, *Timothy Post*, our first Student Award winner, was actively involved as both an undergraduate and graduate student.

OTHER OBSERVATIONS

There are several other items and observations I would also like to mention before closing.

Gender

The Society's Presidency, Program Chair, and Secretary-Treasurer positions were dominated to begin with by males. In 1976-1977, however, Doris Aaronson became the first female program co-chairperson and member of the Steering Committee. Then, in about 1978, Cynthia Null became Secretary-Treasurer, and within the past three years, two of the three Presidents have been female, Cynthia Null (1987) and Cynthia McDaniel (1989), and an increasing number of women have served on the Steering Committee.

Student Award

The first Student Award was presented to Timothy Post in 1977 for a paper submitted while he was an undergradu-

ate at Syracuse University. The title was "Software Control of Reaction Time Studies." The annual award continues and is accompanied by a monetary award and a one-year subscription to *BRMIC*.

Computer Program Abstracts

At the 1972 meetings, the Steering Committee noted a need to communicate the availability of computer program abstracts. As a direct result, a Computer Program Abstract Section was added to the bimonthly publications of *BRMIC*. That section continues as part of the journal.

Affiliation

Although I believe that holding the meeting of S.C.I.P. the day before the Psychonomic Society's gathering has worked to our advantage, every several years, especially during the 1970s, voices were raised seriously suggesting that we cut that tie—that *our* Society should meet when and where it pleased. Had that occurred, our Society would have become an entirely different type of organization. Now, in view of the associations that have been formed between the S.C.I.P. and Psychonomic Society meetings, such a move would be suicidal.

CONCLUSION

Philosophy and Purpose

I speak only for myself, but I believe that the original purpose of this organization involved education and information exchange for the masses as well as for "sophisticated" users. The purpose was at least partially dictated by the state of computer technology and the lack of information that most research psychologists had about the technology and its usefulness in research. This organization has filled a great void over the years, in a sense acting both as elementary school teacher and as graduate research professor. It has not been easy: You appeal to the less sophisticated and you lose the others, or vice versa. Members of the Steering Committee historically have represented more of one than of the other, and there occasionally have been strong expressions of a desire to have a small, more elite and sophisticated group. The Society has survived and continued, but along the way many of the early members who were talented computer-type psychologists have stopped contributing. In the same vein, if one of the main purposes of this group is/was to educate, have we accomplished our goal? At several Steering Committee meetings, suggestions have been made that perhaps there was little need to continue, since "everyone knows about computers now."

But apparently this organization continues to satisfy the needs of not only its current members, but also those of untold numbers of others who read the Annual Proceedings and use or cite the information in their own works.

I have nothing to predict or to advise concerning the future of this organization, despite the title of this presentation. The membership appears to remain fairly constant; I do not believe that the number of members has changed

much from 1972 to 1989. But some of the questions of philosophy and purpose remain and certainly demand further consideration.

Again, thank you for allowing me to express my thoughts and experiences. I feel fortunate in having been able to participate in the founding of this organization, and to have been a participant/observer in its development. I have attended, I believe, all but one Steering Committee meet-

ing since 1972, and have edited all of the Proceedings. It has been interesting and gratifying. The Society for Computers in Psychology and the earlier National Conference have contributed a great deal to our profession. And we mustn't forget the wisdom and contribution of some of the people at the National Science Foundation. For, in the beginning, the gods representing this group said, "Let there be on-line computers in psychology," and man replied, "O.K., but will NSF support it?"