Editorial

The time was about 3:32 in the afternoon and Charles Purcell of CDC was well underway on the delivery of his paper "Cybernetic Analysis of Large Scale Computers," when suddenly, from the floor, came a voice: "I know I'm impolite, this I'm certain of, but..."

The voice belonged to Dr. Avery Johnson. His colleague, Dr. Warren Brody, proceeded to the stage and asked for company—"Anybody who would like to interact 'on line'—come on, come up and stand here." Their basic intent was to feed back to the attendees that they did not care for the way the meeting was being conducted and to do it in rather dramatic fashion. Dr. Brody was joined shortly by Arthur Iberall of GTS, later by Dr. Frank Fremont-Smith (a psychiatrist) who was called upon to act as moderator to the unscheduled, interactive "happening".

From this observer's viewpoint, Drs. Brody and Johnson had commendable intentions, but incredibly poor sense of timing.

Although the ASC workshop the preceding day had been inter-active in real time, the two-day public sessions consisted of invited speakers presenting prepared papers with a 10-minute Q-and-A at the end of each talk. Drs. Johnson and Brody bodily interjected themselves into this format, not to interact with the speaker, but to interrupt. A disorderly take-over of the majorities rights by a minute minority intent on making their point of view known to the majority. Not a democratic process, and in retrospect, not a very effective process either. They managed to communicate their dissatisfaction but not their program.

For the information of our readers, Drs. Johnson and Brody would like to see all meetings—and especially a cybernetic meeting like ours—be more directly inter-active. They want to reduce the delay time from output to feedback. They'd like to see feedback in "real time".

They'd also like to bring in a 3rd or even 4th dimension to meetings. Talk about the urban problem of (Continued on page 3)

Confrontation on the ASC Campus

The lawn outside the National Bureau of Standards meeting rooms provided an appropriate "campus" atmosphere for the dissident element (see editorial) at the ASC's second annual scientific symposium at Gaithersburg, Maryland.

Program Outline Announced for 1969 Cybernetics Symposium

The Society's Board of Directors announced today the program outline for the October, 1969 symposium. To be called "Systems, Man and Society", the three day session will feature invited speakers in the morning sessions, contributed papers in a series of parallel afternoon sessions, and smorgasbord round-table inter-action sessions in the evening. Each table in the evening session will have a titled centerpiece identifying the subject to be discussed and the name of the presiding expert who will moderate the inter-action at that table.

Although it is too early to announce the names of the invited speakers, we are assured by our program committee that they will equal or surpass their outstanding predecessors of 1967 and 1968.

The morning session of the third day will consist of a plenary session sumarizing the results of the inter-active sessions and a report for the future. The meeting will adjourn at noon. Society committee sessions will be held in the afternoon.

Program outline...
Von Foerster Continues as Editor of ASC Communications and Chairman of the Board

Increased demands of his dual position as Head of the Biological Computer Laboratory and Professor of Biophysics at the University of Illinois, prompted Dr. Heinz Von Foerster to resign from the post of ASC President-elect in February. We are pleased to report that Dr. Von Foerster will continue to serve as Chairman of the Board of Directors and Editor of ASC Communications. During the past year Dr. Von Foerster did yeoman service for the Society, as the editor of the Proceedings of the 1967 Symposium "Purposive Systems: The Edge of Knowledge", recently published by SPARTAN PRESS.

Dr. Von Foerster has been intensely involved in the field since his participation in the Josiah Macy, Jr. Foundation Conferences on Cybernetics in the early 1950's. Assisted by Margaret Mead and Hans Lukas Teuber he edited the classical transactions of those meetings. A Founder of the American Society for Cybernetics, Heinz has been a key helmsman in guiding its development since its first meeting in 1964 at the Cosmos Club in Washington, D.C.

Dr. Von Foerster received his Physics diploma at the Institute of Technology in Vienna, 1935, and his Ph.D. in Physics at the University of Breslau in Germany in 1944.

Fraser to Spark University Participation in Wiener Medal Competition

To encourage the participation of as many of our nation's bright young students, fellows and scholars as possible in the Norbert Wiener Gold and Sterling award competition, ASC director Dr. Alexander S. Fraser has been appointed to the post of Chairman of the Awards Committee. Head of the Department of Biological Sciences at the University of Cincinnati, Dr. Fraser brings to this challenging assignment a tremendous enthusiasm and bright faith in the brilliance of the “under-thirty-five” segment of our college and university community. During the coming months he will be developing a communications pipeline (with associated feed-back mechanisms) to guarantee the widest possible participation of the collegiate elite in the American Society for Cybernetics invited papers program, articles for the ASC Communications/Journal, and in its growing workshop program.

Purposive Systems Proceedings Available

As of the end of January, complimentary copies of the Proceedings of the ASC Symposium on PURPOSIVE SYSTEMS had been distributed to all ASC members of record as of October 25, 1968. If you did not receive your copy, please write to: D. E. Knight, IBM Corporation, Armonk, N.Y. 10504, enclosing membership details. Have you moved? Seven copies have been returned marked “change of address”.

Members who joined after the October 25th cut-off date may purchase this excellent cybernetics reference volume at 20% discount—$8.00 per copy.

Non-members may purchase copies directly from the publisher, SPARTAN BOOKS, 423 Park Avenue South, New York, N.Y. 10016, or from major technical bookstores at $10.00 per copy.
Nominees for 1969 ASC Officer and Director Posts

**President**
Lawrence J. Fogel. President, Decision Science, Inc., and Associate Professor, Department of Sociology, San Diego State College. Dr. Fogel received his B.S.E.E. from New York University in 1948; his M.S.E.E. from Rutgers University in 1952; and his Ph.D. in Engineering and Biotechnology from U.C.L.A. Previous posts include: Special Assistant to Director of Research, National Science Foundation 1960. Senior Staff Scientist, General Dynamics Astronautics Division 1965. Holds five patents; published 45 different papers, wrote four books and edited three others. Past President, San Diego Bio-Medical Engineering Symposium; on editorial board, IEEE Transactions, for a number of years.

**President Elect**
Carl Hammer, Ph.D. Presently, Director, Scientific and Computer Services, UNIVAC Division of the Sperry Rand Corporation. Born in Chicago, Illinois, Dr. Hammer graduated from the Luitpold Oberrealschule at Munich, Germany, in 1933. He continued his studies at the University of Munich, with a diploma in mathematical statistics in 1936 and a Ph.D. (magna cum laude) in the same field. Following his return in 1938 to the United States, Dr. Hammer taught at Columbia University and Hunter College. Dr. Hammer is a visiting Professor at the American University and at the Industrial College of the Armed Forces. From 1966 to 1968 he has been Chairman of the Washington Chapter of the Association for Computing Machinery.

**Vice President**
Edmund M. Dewan, Ph.D. Presently, Theoretical Physicist (biophysicist), Biophysics Branch, Data Sciences Laboratory, AFCRL, Hanscom Field. Dr. Dewan received his B.S. from Duke University, Magna Cum Laude, Physics, in 1953; and his Ph.D. in Theoretical Physics from Yale University in 1957. Previous experience includes Brandeis University (Adjunct Assistant Professor); Mass. General Hospital (Consultant in Psychiatric Research and later, Research Associate). Presently, Editor, ASC Proceedings, 2nd annual symposium. Published 17 technical papers, presented 56 technical papers and published 15 technical reports. Honors: 1st prize, Aerospace Educational Foundation. Member: ASC, APS, AAAS, IEEE, SCIAM.

**Secretary**
Lewey O. Gilstrap, Jr. Presently Executive Vice President, Adaptronics, Inc., McLean, Va. Mr. Gilstrap received his B.S. in Engineering-Physics from the University of Oklahoma in 1950, with graduate work in mathematics at the University of Cincinnati and George Washington University. In 1961, Mr. Gilstrap was one of the founders of Adaptronics. He is responsible for the company’s R & D programs in learning automata, neuromine networks, image and signal processing, and stochastic computer concepts. Mr. Gilstrap has authored a number of papers and has several patent disclosures. Presently, Secretary, Washington Chapter of the ASC. Member, Sigma Pi Sigma; Society for Engineering Physics. Chairman of the Board, Adaptronics, Inc.; President, Board of Trustees, School Guidance Center.

**Director**
Harold K. Hughes, Ph.D. Presently, Chairman and Professor, Department of Physics, Indiana State University; Director of Research, Midwest Development Foundation; and Co-chairman, Seminar on Cybernetics, N.Y.C. Dr. Hughes received his A.B. in Physics (with honors) at Columbia in 1934; M.A. in 1943, and Ph.D. in 1948. Previously, Director of Physics Research, Continental Can (1962); Assistant Technical Director, Markite Corp. (1959). Holds 17 patents; published 2 books; 51 published papers and reports, 125 formal addresses. Member Phi Beta Kappa, 1934; Epsilon Chi, 1935, Sigma Xi, 1947; Fellow, American Physical Society; Chairman, Physics Division, Indiana Academy of Science. Member: ASC, ACS, IEEE, AAPT.
Feedback on Confrontation

To: Dr. L. J. Fogel

Dear Larry,

I'm sorry we did not have more of a chance to talk yesterday afternoon, but I did want to get back to you to thank you for the invitation to address your group, and for the exposure to the stimulating discussions that went on.

The concern expressed by several members of your group with respect to the conduct of the meetings and their format must be a matter of considerable concern to you also. It is my hope that you did not object to the change in the presentation which Mike Senko and I were scheduled to give. I found the much more informal discussions quite stimulating.

However, let me point out several observations which may help you in any further consideration you may wish to give to changing the format of meetings as suggested by your members:

1. Although my presentation was less formal, it was much less informative.
2. The question and answer manner of proceeding, while possibly interesting to the individuals involved in the question and answer discussion, may not be as interesting to the general audience — I am not sure.
3. The very broad interests of your members give you, in my judgment, a particularly difficult time in arranging presentations which are of interest to all of your members. In particular, I noticed a sharp cleavage between those I would classify as technically oriented with social interests as contrasted with the group primarily social science oriented. I realize you want these groups to talk to each other and that separate sessions for the two groups is not your objective. But it looks like a problem.

Mike Senko and I found the meeting stimulating, the organization intelligent, and we hope we did not compound your problems.

Sincerely,

A. G. Anderson, Ph.D.

Director of Research

IBM Corporation

Dear Larry:

I am sorry I did not get a chance to have a chat with you at the cybernetic meeting last Thursday but I did not have the heart to intrude when you were so busy. I think you are to be commended on how you handled that ridiculous demonstration of Brodey and a few others that took place during the afternoon session.

The Scotch clan of which I am a member has a motto — liberally translated from the Latin "Don't let the bastards get you down". I am sure they didn't nor will they.

With kindest regards.

Yours sincerely,

(Name withheld by request)
Confrontation from page 1.

Photograph (top left): Uninvited guest Dr. Warren Brody (left) invades the speakers platform at the NBS auditorium and interrupts guest speaker Charles Purcell of Control Data. The confrontation has commenced. (Above, right). Dr. Alexander Fraser, a member of the establishment, emphasizes a point to a comely member of the young progressives.

(Above) Dr. Arthur Anderson, IBM Director of Research, who followed Mr. Purcell on the program, demonstrates adaptability, switching from his planned formal presentation to an informal approach to his subject. For Dr. Anderson’s subsequent analysis of this technique, see "Feedback" on page 4. (Bottom photo). In an attempt to promote a relaxed exchange of viewpoints, Dr. Frank Fremont-Smith (center, white shirt) arranged a luncheon eat-in at the NBS dining room where all sides presented their suggestions for improving the effectiveness of scientific symposiums. The meeting ended in a draw.

Editorial from page 1.

traffic pollution—fill the room with the noise of a freeway; discussing education—use closed circuit TV to look into the classroom; if it’s smog—“fill the room with smoke” and so forth. Create a center with five or ten television screens to cover ten technical sessions simultaneously with an audio controller to handle the switching. Viewers choose the subject they want and go to that meeting.

Exciting ideas. Full of emotional impact. Full of possibilities. And also full of noise and confusion. With too low a signal to noise ratio—what will get communicated?

Also, these are ideas with many contingent problems. Such programs not only take funding, they take manpower. Funding we can probably get. Capable, full time cyberneticians and/or professionals to put together such a program—much harder to obtain.

We are a young, growing society. There are literally hundreds of projects we would like to tackle that funding might be found for but capable manpower cannot. We are not yet ready to try a moon landing.

Our 1968 program was a first try at being experimental—our video-taped interactive workshop at NBS the day before the symposium formally opened—for example. The subject was Urban Problems, with the high-powered title "Methods for Finding Analogies Between Large Physical, Biological and Sociological Systems."

We soon discovered that although we had common cybernetic motivations, we had different vocabularies. It appears we may have to develop a common language, a common semantic structure, if cyberneticians are to truly effectively communicate. We also found technical problems with video tape. One-inch tape is not easily edited. It is not always the best quality image. It is difficult to reproduce, only one good house has been found in the East that can do the job well.

Ampec has kindly volunteered to go into this program with us on a volunteer basis, learning as we learn. Television looks like a good tool—an expensive tool—especially in finding manpower with the time, inclination and creative overview to produce a meaningful end product.

The irony of all this is that the video workshop was stimulated by a suggestion from Dr. Brody to ASC Vice President Fogel which appeared (with credit to Dr. Brody) in the (Continued on page 6)
The zenith of the confrontation, 3:50 p.m. Thursday, October 24th. The participants (L-to-R) Mr. Charles Parcell (invited speaker); Mr. George Jacobi (ASC Director); Dr. Frank Fremd-Smith (ASC Scientific Council); Dr. Warren Brody and Dr. Avery Johnson (unexpected performers); and Dr. Alexander Fraser (ASC Director).

Editorial from page 3.

ASC Newsletter editorial of June 1968. At that time, Dr. Brody chose to input our cybernetic system in a democratic way and he achieved very positive results.

We can only wonder (we still do not know) why he and Avery Johnson chose to disrupt our otherwise straightforward meeting on Thursday to present a concept to an unprepared audience that he had already sold to the ASC management.

From the letters to the editor elsewhere in this Newsletter, you can see the opinions of the viewers who chose to write in on the subject. The response was decidedly against the method of proposal, if not the subject matter, and the ensuing confrontation.

This Society realizes, as does almost any current, progressive scientific organization, that scientific meetings could be much more effective than they are. Many exciting experiments are being carried out. One outstanding recent example was the Aerospace Education Foundation’s November 1968 “National Laboratory for the Advancement of Education.” Their methods were modern, their financial backing was impressive, and their audience included 1600 top educators from across the country. An article in a later issue will describe some of the techniques used.

As ASC Vice President Fogel said on the floor of the 2nd annual symposium at the height of the confrontation, “We are a new Society, built on tenuous grounds. We are trying to allow this new Society the greatest freedom of structuring possible. We are open to all suggestions . . . to improve the Society. I would hope that all of you who want to become part of the Society, I would hope that all of you who want to take an active part, will participate to the fullest. You’re welcome, please accept some of the workload.”

Those of you who want a new look in format, publications, or concept—please step forward and join us. Give us your feedback and we will give you our support. Just one request. Let’s use the democratic process.

—D. E. Knight

Society Names DP Manager

Being a “cybernetic” society has its responsibilities, not the least of which is being to keep its computer records current, accurate and responsive to sophisticated inquiries. To better handle this important phase of our operations, the directors have appointed Rudolph Constantine to the position of Data Processing Activities Manager for the Society. Presently completing a term as ASC Secretary, Mr. Constantine is Data Processing Marketing Manager of the UNIVAC Division of Sperry Rand in Washington, D.C. He has played an important supporting role in the ASCs continued growth, overseeing the multitude of details involved in setting up the registration at the annual meeting, coordinating the many mailings, and handling the many demanding duties of Society Secretary.

Since a key function of a cybernetic system is “feedback,” we suggest that all members cooperate fully with Mr. Constantine by feeding back changes of status, address and title as soon as they occur. Our current breed of computers are indeed precocious, but they are not yet precognitive.

ASC FINANCIAL STATEMENT
FOR THE PERIOD ENDED DECEMBER 31, 1968

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