The publications of professional societies, like the publications of individuals, provide the critical observer a measure of intellectual, social and professional status. The publications of professional societies, unlike the publications of individuals, reflect not only the status of an author but also of a membership—and through your acknowledged association with this membership, this status is reflected directly upon you.

I recently had the opportunity to discuss with the FORUM's associate editors and your President some of the more practical aspects of the aforementioned theme. I was hardly surprised to learn that they felt the future of a professional society very often tracks the future of its publications...with relatively small phase delay.

The American Society for Cybernetics (ASC) presently lays claim to two publications: the Journal of Cybernetics and the ASC FORUM. Of these, the former is the primary scientific publication. Its contents quite clearly demonstrate the technical competence of the ASC membership—but due to its format and frequency, it cannot be considered an effective communication channel for this Society. For this reason, a quarterly newsletter was initiated (recently renamed the ASC FORUM) in an attempt to provide a means of communication for the membership. It should be obvious to our dwindling membership1 that this publication is just not fulfilling its purpose—in spite of the continued efforts of the FORUM's editorial staff—to provide this necessary service to the Society.

There are those who would have us believe that a publication having the quasi-status of a technical journal as well as the informal character of a newsletter is not only unnecessary but inappropriate. Instead, a simple one-page gossip sheet to compliment the Society's meetings and conferences should suffice. But meetings and conferences involve a cost function that cannot realistically be optimized so as to serve all or even the majority of the ASC membership.

Within a society striving for high quality, it is not unreasonable to assume that any one of its many official activities will only interest and benefit a portion of its membership—especially within an interdisciplinary group such as one of cyberneticians.

A major problem exists within this Society: the lack of an effective and efficient means of communication. It is a situation which diametrically opposes all the underlying assumptions which justify the very existence of this or any other society—for of what utility is a society that lacks communication within its membership?

And we, above all others, should be most aware of the necessity of communication, among ourselves as well as others...even as we glibly drop names such as "feedback" and "THE cybernetic approach"!

The source of this problem is intuitively obvious even to the most casual observer. Communication presupposes communicators and information to be transferred. When dealing with machines, one readily recognizes that a "communications breakdown" can be traced to a lack of information, or inoperative communicators, or a malfunctioning communication channel, or any combination of the above. When dealing with human elements within the communications systems, one must also include the concept of apathy. In our specific case, we shall presuppose the existence of information and communicators!

I have tentatively accepted the responsibilities of editor of the ASC FORUM. The condition of acceptance was that I would keep the communication channel open for a trial period of six months, and, following this editorial, the Society membership would decide the fate of the ASC FORUM.

I have established as my objective the upgrading of the ASC FORUM to the quasi-status of a professional publication WITHOUT losing the informal character of a newsletter. The rationale is that the ASC FORUM will then provide:

1. the prestige (to prospective authors) of publicizing their ideas and views in a "reputable forum", and
2. the machinery to provide rapid turnover time between submission and publication, so as to facilitate communication among the members of the ASC.

In addition to changes in format and content, if the Society utilizes and supports this publication, we will change its physical appearance from that of a newsletter to that of a soft-covered periodical (similar to the many IEEE and other group publications), hoping to enhance not only its appearance, but also the population of current and potential contributors.

The contents of the proposed ASC FORUM will consist of:

a. Tutorial Presentations
b. Technical Correspondence and Short Papers
c. Forum Core Topics (correspondence and controversial essays from members)
d. Current Events:
1. within the ASC membership (ASC subgroups)
2. affecting the professional community
3. meetings and symposia (call for papers, etc.)
e. Miscellaneous

We are currently soliciting material in all of these categories. Additionally, I am personally soliciting articles which can logically justify the lack of necessity of a publication such as the ASC FORUM—forewarning prospective authors that submission of such an article will constitute an attempt to communicate, and therefore nullify their thesis!

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1The last year has been one of regression and replenishment for most professional societies. With the reappearance of the Journal of Cybernetics, the American Society for Cybernetics has arrested and is beginning to reverse this trend.
FROM THE DESK OF THE PRESIDENT

When the summer begins to fade, the Washingtonians have returned from their vacations, and the skyline is about to explode into a symphony of color, then a small group of men and women sit down in an office in D.C. to plan the 1973-1974 activities of the American Society for Cybernetics. This is a prosaic task which must be faced once a year. Stock must be taken to determine the strength of the organization and the basis for building another schedule of events to foster the publication media which we are putting out now at regular intervals, keeping our members and friends advised in all matters pertaining to the science, to related interdisciplinary activities, and to what is going on in the Society itself. This time has come and we have decided on a program for the 1973-1974 year which advisedly builds on the experience in achievements of the national as well as the local and special interest groups.

Looking at the past and into the future, it is also necessary to take inventory and review some of the milestones which have been passed and which will have to be born in mind in any planning operation before we can commit resources of the Society, be they financial or in terms of membership. Financially, the Society is sound. It has maintained its financial strength throughout the year. Although we have not added to our assets, we have at least been able to sustain the equity with which we began our fiscal year.

In terms of membership, we may not have done as well as should have been expected. The unfortunate experience of last year, when due to a unilateral action by the publisher, the Journal did not appear at all, was one cause for the decline in our membership. This trend has been arrested, members have been renewing their membership and new members have been accepted. The Journal is back on the stands, the next issue is in the mail and may have reached you already by the time this issue of the ASC FORUM is delivered. The ASC FORUM is being strengthened (see the editorial), and I am happy to say that the new board of editors and reviewers under the chairmanship of Professor K. S. Narendra will further the destiny of the Journal. We may state that in spite of the fact that no meeting, conference, or symposium has been held this year, to date, the Society has regained its visibility and is now moving forward with plans to promote local conferences as well as symposia in other cities of the United States. We have talked about these plans in previous issues of the ASC FORUM and are in a position to present to you (see pp. 5 and 6 of this issue) outlines of two conferences which have been planned, one for November here in Washington and the other (tentative) in March 1974 which will be held at the Annenberg School in Philadelphia. The details can be gained from the announcements on other pages of this issue.

In addition to the Journal and the ASC FORUM, we have published the Proceedings of the 1971 Fall Conference and will be releasing the 1972 proceedings in short order. So much for the outline, administrative, and publicity factors, that members and others are entitled to know.

It is now our turn to look to you, our membership, for support because none of our plans will come to completion successfully without the help and active assistance by every man and woman registered as active member in the Society. There are opportunities now for immediate and direct assistance in the form of positions to be filled in the next election (which will be announced next month) and also on various committees which are being organized to implement the plans I have outlined in the foregoing. A questionnaire is being mailed to all members indicating the available positions and asking them for their preferences in actively assisting in the implementation of our program. It will be most satisfying and helpful to be able to man some of these positions with more than one member; this will effectively develop the committee nature to support activities which have been approved by the officers and directors of the Society.

I hope that many of us will avail ourselves of this opportunity to help the Society flourish. Do not forget that we are now represented directly, through members of the scientific advisory committee and our editors and reviewers, with many educational institutions throughout the country. We may look forward to the participation and support by those who have not known enough about the activities of this Society, but are in a position to provide us with scientific papers and suggestions for topics and other information which will keep all of us abreast of new developments.

I wish all of you a successful new program year and hope to meet with you at local meetings, national conferences, and possibly outside of the Society.
Computers and Visual Literacy

A presentation to the
3rd Man Computer Communications
Seminar, May 30 and 31, 1973
Ottawa, Canada
by
Gordon B. Thompson,
Bell Northern Research,
Ottawa, Canada

The keynote speaker for the first Man Computer Seminar held by the National Research Council was Professor John R. Licklider. At that time, Professor Licklider engaged in what many must have thought was outlandish forecasting. If my memory is correct, he predicted that the impact of widespread interactive computer graphics could be so profound as to induce us to adopt an ideographic form of writing. At the time, this particular forecast seemed rather remote, but reasonable. Now, we must question the whole basis of casualty implied in Dr. Licklider’s forecast. Unquestionably, our society is moving in the direction of increasing its use of ideographic communication, and measureably so, but we haven’t solved the problems of interactive graphics sufficiently well to consider widespread use of computer based interactive graphics systems. Dr. Licklider’s effect seems to be occurring without the cause.

Perhaps the fact of the matter is the other way around. As a result of our society’s increasing use of visual symbols and signs, we may be moved to solve the problems associated with the technology and data structures of interactive graphics material.

MacLean’s magazine now carries cartoons that neatly divide into two classes. Those with words, and those without. Over the past year, the average has been such that half are wordless, and half have either captions or words in the picture portion. Clearly this must be a policy, for the variation month to month is one cartoon, and the average has held for a year and a half. A decade ago, a cartoon had to have labels.

Some bright remarks had to be associated with all pictures even though some might otherwise have been self-sufficient. The consistency of this change suggests that it is important enough to be recognized as a significant thing to control by the publisher. Canadians no longer need trivial words to understand a good visual joke.

A couple of years ago, we designed a visual joke that served as a test instrument to classify people’s biases in the area of communications and computers. The visual consisted of Brian Smith seated at a 2741 terminal, somewhat softly focussed, while in the foreground an acoustic coupler with a very old fashioned telephone set appeared quite prominently. People who saw this picture, and showed essentially no reaction, were either visually illiterate or were technologically undernourished. Those who laughed appreciatively were visually literate technical people who knew what computers and communications were all about. Those who got angry were clearly telephone bigots. The visual appeared in Datamation. I leave it to you to guess which classification the editor fell into.

When this picture is shown to many engineers, they fail to respond, for their level of visual literacy is too low. Consider for a moment the slides engineers use for illustrating a technical paper. Most could be made on a typewriter! More general audiences do get a considerable amount of enjoyment from the visual jokes. This suggests that many who are involved with the development of visual communications and interface technology are not really that well equipped to deal with the problem if appreciation of visual humour is a measure of any importance.

It has been argued that Television is the trigger event that caused the quantum jump in visual literacy in our society. Television, however, is the one great example of a culture expressing its visual illiteracy! It is only rarely that the picture is used to express one aspect of a situation while the sound expresses another. TV sound makes fine radio. Our emerging visual literacy has not been strong enough to overcome the legacy left to TV by its parents, radio and cinema.

In a similar vein, many astute observers of cinema suggest that talkies set that art back some fifty years. A notable exception to the common run of visually illiterate films is the Beatles’ “Yellow Submarine”. Some exciting things are beginning to happen in television, and every now and then the CBC comes up with an outstanding example that shows a high level of visual literacy both in its production and in its expectation of the audience.

It would seem as if the thing that triggered this visual literacy revolution is rather insensitive to the effect itself. This is really not too surprising. The significant effect of most great innovations has been visible only after much analysis, and seems only in retrospect to have any relation with the innovation itself. Lyn-White’s case that the iron stirrup triggered a reorganization of European transaction patterns illustrates this point. One would hardly consider the iron stirrup an economic type thing. Yet it is the one great example of a culture expressing its visual illiteracy!

Picturephone as a visual service seems to have been less than a success. The understanding of the visual communications that was available when the decision was made to proceed was just not great enough to assure a successful service offering. The level of visual literacy of the subscriber rose considerably over the decade or so that it took to perfect the technology of Picturephone. Because the change was along an unmonitored dimension, the designers were insensitive to the impact of that change. Only recently have utility studies been done to examine the supposed value of visual communications in the Picturephone style. These studies, done by Alex Reid in London, have thrown serious doubt on that utility.
A Russian medical doctor* made a series of brain lesion studies on Chinese victims of the Korean War. Similar studies had been done in the west, and a clear pattern existed between specific wounds and particular skill losses. A well founded relationship tied a certain type of wound and loss of the ability to read or write. The studies on Chinese victims established that different wounds affected Chinese literacy skills, and the wounds that eliminated literacy in Caucasians had no effect on Chinese literacy skills. It would seem as if the two forms of writing, phonetic and ideographic, are really quite different, even to the extent of involving different brain areas.

Marshall McLuhan claims our society is highly visual. His use of this expression is very confusing, for he is describing a characteristic for which we have no commonly accepted explicit terminology. He is referring to our propensity to organize in linear sequences. The prototype for this kind of behavior, according to him, is the motion of the eyes scanning printed text, moving from letter group to letter group in slavish sequence. He suggests that the skill to associate a string of aural symbols with a string of visual ones, when very highly developed, inhibits the ability to directly associate meaning with visual symbols. Hence to the extent that a society devotes itself to phonetic literacy skills, it seems to lose its visual literacy skills. This does not seem to be disputed by our current knowledge of different cultures. The Japanese case is closest to our own situation seems to support his view of mutual exclusivity of the two forms of literacy. One can amass a considerable amount of data to support the case that our use of purely visual symbols and signs has increased considerably in the last decade. That this is not due to our bilingual speech but is a matter of whether or not one can afford to properly evaluate it. Overruns involving an order of magnitude error are not unknown in this evaluation area.

Chairman Mao has decreed that the system of Chinese writing shall be simplified, that Mandarin shall be the universal dialect, and that a phonetic alphabet shall be developed. Much progress along this line has been made. While the Chinese are busy going one way, we seem bent on going the other. Eventually we may all end up with the Japanese trick of having both an ideographic and a phonetic form for written communication, but with a more equal emphasis on the two parts. It would be interesting to do an analysis of Japanese brain lesions to determine if particular wounds affect skills in one or other of the two sectors of their writing system.

Quite clearly the seeds for some very significant changes are germinating. Also, as in the case of Picturephone, there are seeds of many disappointments. The complexities and subtleties of visual communications hold many surprises. The research necessary to remove the uncertainty from these surprises is to a large extent in areas that are not neatly context free, and many workers used to nice context free scientific methodologies will be distressed. The balance between performing the experiment and evaluating it becomes reversed, with evaluation consuming the lion's share of the resources. It is no longer a matter of determining if an experiment can be done or not, it becomes a question of whether or not one can afford to properly evaluate it. Overruns involving an order of magnitude error are not unknown in this evaluation area.

We have before us what may be one of the great leaps forward, the development of a society that is proficient in both phonetic and ideographic communications, and is equipped with the tools to make both these forms of communication really effective. There are many problems. Our particular cultural limitations, our technological limitations and our limited understanding of language are but three. Canada is in an ideal position to lead the World in this effort. We have the technological resources, we even have the wealth, if we are careful, and some of our native people can teach us much about visual literacy.

If you have ever tried to edit a television tape you will now understand why the content of television is so visually illiterate. It is only recently that television has become easy to edit. And then only for the very large production centres. The video tape manufacturers' total lack of understanding of the importance of editing has been very effective in containing the VTR "Revolution". One very notable and exciting ray of hope is the efforts of a group of dedicated souls in Montreal, started by the National Film Board, who call themselves Videographe. By bringing editing processes to the community, they have proven that ordinary people off the street can produce video material that is first-rate. The common people have a sense of the visual that exceeds the professional's estimation. Subsequent funding of this enterprise has proven quite difficult. It is a most interesting case study.

We have before us what may be one of the great leaps forward, the development of a society that is proficient in both phonetic and ideographic communications, and is equipped with the tools to make both these forms of communication really effective. There are many problems. Our particular cultural limitations, our technological limitations and our limited understanding of language are but three. Canada is in an ideal position to lead the World in this effort. We have the technological resources, we even have the wealth, if we are careful, and some of our native people can teach us much about visual literacy.

Hopefully, our television lathering of the Inuit won't destroy their visual competence.

*Noam Chomsky, CBC Learning System, Audiotape Catalog #250, Linguistic and Revolution. Published by the Canadian Broadcasting Corporation, Box 100, Station A, Toronto 116, Ontario, Canada.
ANNOUNCING A TWO-DAY CLINICAL WORKSHOP
on
THE FRAGMENTED SOCIETY AND THE PHYSICALLY DISABLED: A PROBLEM OF COMMUNICATIONS AND CONTROL
Sponsored by
AMERICAN SOCIETY FOR CYBERNETICS
29-30 November 1973
The Brookings Institution Auditorium
Washington, D.C.

The American Society for Cybernetics announces a two-day clinical workshop, 29-30 November 1973, whose objective is to arrive at a model for efficient use of information technologies in the employment of the competent severely disabled person. This is an invitation to participate in an interdisciplinary workshop aimed at a systematic synthesis of technological, human and environmental resources on behalf of the job aspiring severely disabled persons.

The two-day workshop is not a R & D effort nor a conventional analysis conference, rather it is a solution-oriented workshop with useful and immediate impact.

The first day is information and problem-oriented, and the second day is solution and application-directed. The first morning section will be dealing with data and information about: (a) the kinds and prevalence of real jobs, present and near-future, resulting from the technological revolution; (b) the numerous but generally unknown applications of information and communications technologies in the job training, the education and the vocational placement process of the physically handicapped person; and (c) the systems contemplated and being designed now which are directly and indirectly related to the development of jobs for the severely disabled person. At the end of this morning session, all workshop participants will have gained a familiarity with what technologies are available and of some of the present and near-future applications.

The problem of the workshop will be outlined in a clinical presentation in the afternoon session — how to get the technologists, cyberneticists and systems people together with the vocational rehabilitation profession in order to more efficiently use available and sometimes scarce resources. The vocational rehabilitation problem of two severely disabled citizens will be presented by these persons and by persons working with them (physicians, vocational rehabilitation counselors, occupational therapists, placement directors, etc.). These two physically disabled citizens will represent the “disabled client of the future” who, in order to find substantial and satisfying employment, must be viewed differently in terms of a radically changing society with changing resources. An interdisciplinary panel of specialists from the systems and information technology industry and professions will engage in a dialogue with the disabled person and their rehabilitation colleagues.

At this point, the problems impeding the successful vocational rehabilitation process will visibly emerge from systematic exploration. This is the prelude to the problem solving and model construction approaches of the second day.

During the morning session the panel will offer alternative solutions based on a total systems approach and present and near-future technological resources. Represented will be the concepts from biomedical engineering, cybernetics, systems management, industrial engineering, economics, social organization and disciplines REALISTICALLY in touch with the new demands and capabilities of a new society. The two disabled clients, members of the rehabilitation profession and other audience participants will continue the dialogue into the midafternoon, verifying the validity of proposed solutions. A keynote “synthesizer” will integrate other workshop approaches and present a “how to” next step on behalf of the two aspiring workers, specifically, and on behalf of the industry-rehabilitation matrix generally.

If you desire input into this workshop, contact the general program chairman:

Thomas R. Shworkes
Assistant Research Professor of Medicine
Rehabilitation and Research Training Center
The George Washington University Medical Center
2300 Eye Street, NW, Washington, DC 20037 (201/331-6847)

Other members of the program committee are:

M. D. Lowe
Sperry-Univac Computer Scientist for
Computer Assisted Education and Instruction
2121 Wisconsin Avenue, NW, Washington, DC 20007

Donald Linkowski
Chairman, Department of Education
The George Washington University
2201 G Street, NW, Washington, DC 20006

John F. McCarthy, Jr.
Associate Professor of Management
Director, Information Technology Program
The George Washington University, Hall of Government
Washington, D.C. 20006
During the last four meetings, members of the Biocybernetics Group focused their attention on a problem area suggested by Mark Ozer. In summary, the area can be characterized by the question, "How can medical history taking be made into an enhancing process to a patient instead of a detrimental process?" A step toward a solution of this problem is found in the coping strategies people have invented without the help of physicians. In other words, there is a subset of people who do not visit physicians, who are not free of physical or mental problems, but who have devised successful adaptive strategies for handling their problems. We postulate the existence of a vast collection of information on how people in this subset deal with their problems without medical assistance. There is little doubt that such information exists.

During the 15 May 1973 meeting of the Washington Area Biocybernetics Group, members recounted examples of their own problem-solving strategies they used to handle some health or life situation difficulty. We proposed to collect further examples of such strategies and to devise a taxonomy of strategies. The collection and eventual classification of such strategies might provide a data base for communication to physicians and others dealing with patients who have come to them because of illness.

As a beginning, we ask interested members of the ASC to communicate their answers to the question:

What has worked for you in dealing with a life situation or illness?

Our plan is for the Washington Area members of the Biocybernetics Group to review and summarize the replies to the above question and to distribute the summaries to all members of the Group. We hope to get responses to this first mailing and thus generate a dialogue on the problem area leading towards a solution. All communications should be addressed to:

Edward H. Kingsley
11322 Links Court
Reston, VA 22090

CONFERENCE CALENDAR

22 September 1973
SECOND ANNUAL CONFERENCE OF THE MIDDLE ATLANTIC REGION OF THE SOCIETY FOR GENERAL SYSTEMS RESEARCH on "The Systems Concept as a Scientific Paradigm". University of Maryland. Registration by mail and further information requests address to: Middle Atlantic Region SGSR, 5305 Riverdale Road, #11, Riverdale, MD 20840.

23-26 September 1973
28th ANNUAL TRANSPORTATION AND LOGISTICS FORUM AND EXPOSITION, sponsored by the National Defense Transportation Association, Washington Hilton Hotel, Washington, DC.

23-27 September 1973
SECOND INTERSOCIETY CONFERENCE ON TRANSPORTATION, sponsored by fourteen different societies. Denver Convention Complex and Brown Palace Hotel, Denver, CO.

4-5 October 1973

9-11 October 1973

21-25 October 1973
36th ANNUAL MEETING on "Information: Benefits and Costs", American Society for Information Sciences. Los Angeles Hilton Hotel, Los Angeles, CA.

29-30 November 1973
TWO-DAY CLINICAL WORKSHOP ON THE FRAGMENTED SOCIETY AND THE PHYSICALLY DISABLED, sponsored by ASC, Washington, DC (see page 5).

28-30 December 1973
ECONOMETRIC SOCIETY WINTER MEETING, New York, NY.

14-16 January 1974

14-16 March 1974

22-24 April 1974
JOINT NATIONAL MEETING, sponsored by Operations Research Society of America and The Institute of Management Sciences, Boston, MA.

June 1974

24-28 June 1974
1974 INTERNATIONAL CONFERENCE of Data Processing Management Association. Minneapolis, MN.

5-10 August 1974
IFIP CONGRESS '74, Stockholm, Sweden.
CALLS FOR PAPERS AND PARTICIPATION

The American Society for Cybernetics invites scholars and practitioners to a conference on COMMUNICATION AND CONTROL IN SOCIAL PROCESSES to be held 14-16 March 1974 at the University of Pennsylvania in Philadelphia. Papers should be submitted in duplicate to Professor Klaus Krippendorff, c/o American Society for Cybernetics, Suite 530, 1130-17th St., N.W., Washington, D.C. 20036 no later than 10 January 1974. Shortly thereafter program information will be made available upon request.

We invite papers on the following subjects:

Methodological and philosophical topics that focus on the limitations of and criticize the way we proceed when attempting to understand and to solve social problems: problems of observation and action, of theory and practice; presentation of new developments of analytical methods for assessing properties of complex systems, particularly those of communication and control.

Man in social forms of organization. Contributions to social control theory, including contributions that facilitate the understanding of how individuals communicate with each other and thus become integrated into larger units, whether this is a family, a business organization or a political system; the structural constraints they thereby accept; how social structures manifest themselves communicatively: how they grow and disintegrate; the role of conflict within social organizations and to what extent these processes determine their own cause or can be coped with rationally.

Large social systems. Conceptual approaches and mathematical techniques for analyzing or for managing large systems involving complex forms of interaction and man. For example, political systems: how communication and the exertion of power within and among them can be conceptualized, measured and modeled; cultural systems; what factors facilitate or inhibit their transmission from one generation to the next, the social dynamics they imply and the ecological basis they require; urban and regional systems: the communication networks they contain and the contexts within which they survive and die.

Knowledge structures in society. Papers concerned with the structure and with the effects of the ways information is manipulated or disseminated by computers or by technical means of communication and by man or interpersonal communication, respectively. The grammars, life times and quantities of information processed; the cost/effectiveness of information technology employed in government, business, and in education; the social processes thereby directed and their influence on the quality of life.

Papers being submitted must not have been published previously. They may be submitted initially in rough outline form. If accepted, a final version must be provided by 1 March 1974. Authors of accepted papers are expected to present them personally at the conference and must agree to their subsequent publication in the Conference Proceedings.

MEMBERSHIP AND RENEWAL APPLICATION

GENTLEMEN:

Please consider my application for membership/renewal in the American Society for Cybernetics. Annual dues are $20 for members and $5 for students. Dues include the quarterly letter, and the ASC quarterly journal.

Return together with your check to: Mr. Gary D. Bearden, ASC Suite 530, 1130-17th Street, NW Washington, DC 20036

NAME

ADDRESS

CITY STATE ZIP

TITLE/OCCUPATION

SIGNATURE

22-24 April 1974

JOINT NATIONAL MEETING, ORSA and TIMS, Boston, MA

Two copies of abstracts should be mailed to:

Professor Jerome D. Herniter, 212 Bay State Road, Room B-2, Boston, MA 02215 before 31 October 1973.

5-10 August 1974

IFIP CONGRESS '74 Stockholm, Sweden

Papers should be sent, 1 complete final copy and three additional copies of cover and abstract pages to:

Dr. Herbert Freeman, Chairman, Programme Committee IFIP Congress '74, c/o IFIP, 210 Summit Avenue, Montvale, NJ 07645 to arrive no later than 15 November 1973.

1971 PROCEEDINGS

The proceedings of the 1971 Fall Conference, ASC, which was sponsored by the Washington Chapter, are now available in print on request. The price is $3.50 per copy.

Participants of the meeting, who did not receive their free copy in their mail, are asked to send us a note to that effect, including their present address.

The ASC FORUM is published quarterly by the American Society for Cybernetics, c/o Suite 530, 1130-17th St., NW, Washington, DC 20036, for ASC members. Single copies free. Annual dues $20 for members, $5 for students.
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