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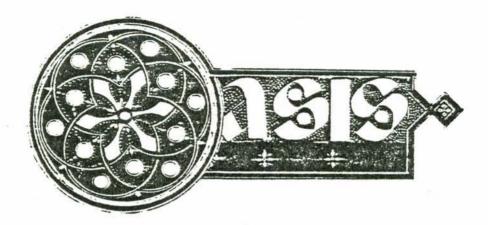# ORGANIZATIONS AND SOCIETY and INFORMATION SYSTEMS

w.g. 8.2.

NEWSLETTER 2.   JANUARY 1984

FROM THE CHAIRMAN OF W.G. 8.2

ENID MUMFORD
PROFESSOR OF ORGANIZATIONAL BEHAVIOUR
MANCHESTER BUSINESS SCHOOL
BOOTH STREET WEST
MANCHESTER M15 6PB.

TELEPHONE: 061-273-8228

TELEX: 668354

OASIS

ORGANIZATION AND SOCIETY AND INFORMATION SYSTEMS

THE NEWSLETTER OF IFIP WORKING GROUP 8.2

SECOND ISSUE, JANUARY 1984

Happy New Year everyone.   I hope that in 1984 you will be joyful
and prosperous and have many opportunities for exciting and creative
thinking on issues relevant to our group W.G 8.2.   I have had a
number of letters from friends and members saying that they like the
newsletter.   Thank you very much for writing, I do appreciate it.

We have a great many things to discuss via our newsletter.   Let us
start with our own working group meeting to be held from 1st to 3rd
September at the Manchester Business School.

W.G. 8.2 COLLCQUIUM.   Title: I.S. Research - a doubtful
science?

Your committee - Enid Mumford, Rudi Hirschheim, Guy Fitzgerald and
Trevor Wood-Harper have had their first meeting.   At this we decided
the following

Name, Funding, Venue etc.

1)   The September 84 meeting shall be called a colloquium, not
     a conference.   This is because 'conferences' have to be
     formally approved by IFIP and this approval requires a
     considerable lead time.

     It shall be for W.G. 8.2 members and friends

2)   Name of Colloquium   This is:

          I.S. Research - a doubtful science?

3) <u>Numbers likely to attend</u>

      Around forty

4) <u>Venue</u> Manchester and Manchester Business School.

5) <u>Finance</u> It must be self financing as IFIP will only assist 'formally approved conferences'. However the Committee will approach U.K. Companies to see if they will make financial contributions. Twenty firms giving £100 would help very much. In return we can offer to have their name on the programme and send them the proceedings.

Papers

There will be two kinds of papers:

1) Those which are general statements about research methodology.

2) Those which provide case study examples of the use of particular methods in particular research situations. These case studies will have a speaker and a discussant.

We can allow 1 hour, including discussion, for papers in category 1; and 1½ hours including discussant and discussion for papers in category 2.

People giving papers under category 2 will be asked to write a one or two page description of the case study project before providing a detailed examination of the research method used and the reason for the choice of this.

Speakers

We already have a large number of possible speakers but if anyone else would like to be a speaker or a discussant will they let me know.

Papers should be with the Committee by the end of April.

Starting time of Colloquium

This could either be 1) Saturday evening, with the first papers on Sunday morning <u>or</u> 2) Saturday lunch time, with the first papers after lunch. Option 1 would allow for eight papers, option 2 for ten

Publication of Proceedings

There are a number of options here.

1) To have North Holland as publisher (they are the official IFIP publisher)

2) To find another publisher. Gordon Davis is finding out if the MIS Quarterly is interested in publishing a special issue for our papers. We also have a good contact with Ellis Horwood, a U.K. publisher.

3) To bind the papers ourselves and distribute ourselves.

Do try and come in September. You will enjoy it and all our views should make an excellent contribution to the debate on research methodology

IFIP TC 8 MEETING

This was held in Paris on 23rd September, chaired by Gampio Bracchi, and Enid Mumford and Niels Bjørn Andersen were both there. Here are my notes on some of the issues discussed.

Planning for IFIP

IFIP is at present re-examining itself in terms of objectives, structures etc. For example, should its conferences use invited papers or submitted papers. Members seem to prefer a mix of invited papers plus panel discussions. Another issue is who chooses invited speakers. Should each technical committee be given responsibility for a part of the conference programme? IFIP 83, which was held in Paris, did not really involve the technical committees in conference organization, and there were few representatives of technical committees as speakers. One difficulty that IFIP has, whatever it does, is that it is influenced by three conflicting aims 1) to stimulate debate 2) to represent all national interests 3) to avoid losing money.

OASIS

I told the TC 8 Meeting about our plans for OASIS and they expressed great interest. George Glaser, a Vice President of IFIP, who was present said that we might be able to get funds from IFIP for OASIS. IFIP was extremely interested in a wider public knowing about its work. OASIS would be a vehicle for assisting this.

In addition to circulating OASIS to WG 8.2 members, I was asked to send it to all TC 8 national representatives and also to Dr. Jack Rosenfeld who is the new editor of the IFIP newsletter.

Future Conferences

Niels and I communicated to the meeting WG 8.2s intention to have a conference on 'Research Methods in Information Science' at the Manchester Business School in September 1984. The fact that our dates are 1st to 3rd September means that our conference will immediately precede the one at Imperial College - INTERACT 84 which begins Tuesday 4th September. Some of our participants may wish to go on to this.

There will be a meeting of the TC 8 Committee on Friday 7th September at the British Computer Society

TC 8 noted that WG 9.1 was proposing to have a working conference on Methods and Experience of Participative Systems Design in 1985. The members of WG 8.2 expressed a wish to join with WG 9.1 in this conference and I said that I would write to the Chairman, Ulrich Briefs. (This conference has now been postponed to 1986).

Niels proposed that WG 8.2 should hold a working conference on 'Information Systems Assessment' in 1986. This could be held in Denmark. Key questions for the I.S. professional would be 'Do you recognize a good information system when you see one?' 'How do you make this judgement?'

Cognizant Trustee and TC 8 Review

George Glaser, the Cognizant Trustee for TC 8. told the meeting that
IFIP now wished to review the role and progress of TC 8.   The Technical
Committee had been founded in 1975 and these reviews were supposed to
take place after six years in order to determine that each TC was
achieving its objectives.   A review committee, chaired by Jim Finch
of TC 11. and Canada, would be set up and this Committee would produce
a report.   This would go to the Cognizcent Officer, then to IFIP APC
and then to the General Assembly of IFIP.   TC 8. would be asked to make
a statement on its activities, problems, opportunities and issues for
the report.

The aim of the review was to ensure that TC 8. was working in the best
way and was highly thought of in its own community.

Your suggestions for working conferences

Please, may we have your suggestions for topics for working conferences,
also venues for these.   If you could send these as soon as possible to
Niels Bjørn Andersen, Information Systems Research Group, The Copenhagen
School of Economics and Business Administration, Jul. Thomsens Plads 10,
DK-1925 København V, Denmark.   He will bring these forward at the
meeting in Sidney in April.

IFIP AND OTHER CONFERENCES

IFIP

IFIP is already planning its conferences for the next three years.   IFIP
Congress 86 will be held in Dublin, Ireland from 1-5 September, 1986.

TC 8, W.G. 8.1 proposes to hold working conferences on information
system design methodologies in May and September 1985.

TC 3 Education is planning fourteen conferences in the period 1984-1987,
most of which would be of interest to W.G. 8.2

TC 9 Computers and Society also plans eight conferences relevant to our interests. Interact 84, the conference which immediately follows ours, is organized by WG 6.3 (Human Computer Interaction). This will be held at Imperial College, London, from 4-7th September 1984. Subjects covered will be Human Factors in System Development, Design and Evaluation Methods, Human-Computer Interface Design, Impact of Computers on Human Behaviour, Human Aspects of New Horizons.

Other Conferences, meetings and specialist groups

There are a tremendous number of these. Here are a few about which I have received information.

Convention Informatique. Data Processing: Pleasure Cruise or Expedition. September 17-21, 1984, Paris, sponsored by SICOB.

Ecology of Work Conference, June 13-15 1984, Chicago.

The British Computer Society Business Information Systems Specialist Group is setting up a working party to consider the whole area of planning for the development of information systems.

Frank Land is organizing a group of academics interested in the design of information systems. The inaugural conference was held at the British Civil Service College, Sunningdale on Tuesday 13th December 1983.

Conference Reports

Gordon Davis has sent a note on the very successful WG 8.2 Working Conference, 'Beyond Productivity'. This was held in Minneapolis on August 22-24, 1983.

Gordon writes:

Conference attendance was in the target range. There were excellent invited speakers and contributed papers, and a good variety of participants. The proceedings are to be published by North Holland by the end of 1983.

Organisers and speakers:

Conference Chair:	Niels Bjorn-Andersen, Denmark
Program Chair:	Th. M.A. Bemelmans, The Netherlands
Arrangements Chair:	Gordon B. Davis, USA.

Invited Speakers

Peter Checkland, University of Lancaster, Great Britain.
    Invited to speak on systems concepts

Enid Mumford, Manchester Business School, Great Britain.
    Invited to speak on participation

Renate Mayntz, Institut fur Angewandt Sozialforschung, Koln, W.Germany.
    Invited to speak on relevance of sociology research

Chris Argyris, Harvard University, USA.
    Invited to speak on organizational behaviour.

Paul Johnson, University of Minnesota, USA.
    Invited to speak on expertise research.

Contributed Papers

North America		6
European		14
	Total	20

Positions of Participants

Academics		46
Ph.D. Students		12
Practitioners		17
	Total	75

Format of Conference

Niels Bjørn-Andersen opened the conference with an overview.   Each
half-day session began with an invited speaker (1 1/2 hours with time
for discussion).   Two concurrent contributed paper sessions had two
papers each (45 minutes per paper and discussion on paper).   Breaks
were one-half hour to promote interaction.   Preliminary proceedings
were provided.

Reaction of Participants

The overall reaction of all types of participants was excellent.
Some typical comments were:

Practitioner:	"Excellent. Helped me with ideas and directions".
Student:	"Glad I was able to come. It gave me new perspectives, especially the European view".
Academic:	"Size of conference was just right. One of the most stimulating conferences I have experienced".

Proceedings

The proceedings of five invited papers and 20 contributed papers will
be available about the end of 1983. Theo Bemelmans is editor.

DISCUSSION FORUM

I have received a number of extremely interesting papers for discussion.
Here is a summary of each of them. Please do write to me with your
comments, reactions etc. and lets get the network discussion going.

Gordon Davis - The risks of user developed systems

Gordon gave a most stimulating paper at the DSSD Users Conference in
Topeka, Kansas. He called it Caution: User Developed Systems May be
Hazardous to Your Organization.

Gordon's paper describes a situation in which the technical specialist
plays a very minor role and the user assumes responsibility for systems
analysis and design. He begins by listing the advantages of users
designing and implementing their own decision support systems. These
are 1) this approach relieves the shortage of system development
personnel. 2) It enables the user to specify the system requirements
and eliminates the problem of the analyst at the interface. 3) It
transfers the systems implementation process to the user, and poor
implementation is one of the major reasons systems are not utilized.
But, he points out that there are inherent short-and-long term dangers
in this transfer of responsibility. These dangers may be overlooked
in the enthusiasm to involve the user.

The risks described by Gordon are first those associated with the users lack of design knowledge. The technical expert does at least provide an 'outside' review of a new system and a means for enforcing appropriate standards. Users may also tend to depend very much on their current understanding of needs and this approach may work well in situations of low uncertainty. However a more radical trial-and-error approach with an evolving application may be better when there is high uncertainty. Users may also make systems design errors. They may try and solve the wrong problem or apply the wrong analysis or the wrong model. They may not have adequate procedures for testing, documentation, validation etc. They may also believe that their programs are relatively error free when this is not the case. Gordon points out that this phenomenon is often observed in students, who underestimate the probability of errors and discount the need for quality assurance and testing procedures. Lastly, there is a risk that the end product will be an unstable user system. One that is easy to change but which affects adversely other systems that interact with it.

Gordon ends his paper with a number of recommendations to minimise these kinds of risks. These are:

1. Provide analysts as advisers and reviewers.

2. Have organizational policy that user-developed systems must be reviewed and documented (or that an analyst must participate during development).

3. Provide user training in problem finding, problem formulation, and requirements analysis.

4. Provide ongoing training feedback through review (by analysts auditors, and others) for design, requirements, quality, controls and stability.

5. Include automatic documentation procedures and quality assurance procedures in the development system.

6. Provide user training in application quality assurance and controls. Provide analyst walkthru.

7. Provide user motivation for and training in stable systems.

Nancy Bancroft - The jobs, skills and relationships of systems designers

Nancy would like to get a debate going on the following topics 1) the future jobs and skill set of the IS professional and 2) the nature of the relationship between IS and their clients or users. She has sent me a paper on The Changing Role of the MIS Professional. Here are some of the points she makes in this.

'In the past there were very few MIS types and they had to be terribly expert in what they were doing. They preferred to be very mystericus and users came and knocked gently on the door of their environmentally regulated room and asked respectfully for what they wanted'. Today, life has become very different. Nancy's vision of the future is 'a user sitting in his/her office having a conversation through a voice actuated system, telling the computer what the program needs are.....

There will be 1) fewer programmer/analysts, 2) less need for large data processing centres, 3) really user friendly application development tools, 4) many more people interacting with the technology as part of their jobs'.

These developments mean that there will be more business analysts with the technical specialist acting also as a business partner and making recommendations on business strategy. Nancy, as an MIS professional, believes that the following questions need asking.

1. What are MIS professionals in business to do (what is their mission)?

2. How shall we carry out this mission (how shall we organize ourselves)?

3. Where is the boundary to be drawn between the territory of the MIS professional and that of the user?

Nancy suggests that MIS professionals will do a better job if they shift their focus away from automation and towards creating a more effective business unit through the use of technology, where appropriate. She says, 'no one wants automation for its own sake. What they do want is the capability of doing their jobs better and faster in order to achieve their personal, group, business and corporate goals'.

If technical specialists accept this new business oriented role then they need a new mix of skills. These will include: a knowledge of technology and a knowledge of business, consulting skills, organization skills and managerial skills. Using these skills they will need to work in the following way:

1. As equal partners with users.

2. Taking responsibility for the business unit. This means a shift in focus from automation to the effective functioning of the unit.

3. With objectivity. Helping users to define what is needed and to develop a process for achieving this.

4. Propose processes to clarify issues and roles, and solve problems.

5. Understanding and communicating the complex network of variables that can affect the successful implementation of a system. Such as the possible effects on employees and on the users overall productivity.

Enid Mumford - Lessons from the first industrial revolution

Enid Mumford has also written a paper comparing how the first industrial revolution affected Lancashire with what is happening today.

If anyone would like copies of these papers would they be kind enough to approach the authors direct.

Expert Systems

Here is yet another fascinating subject for debate.   Niels Bjørn-Andersen recently featured in the British Times because of his critical comments on the route expert systems are taking at present.   They seem dedicated to diluting expertise by removing knowledge from specialists, placing it in a computer, and making it available to non-experts. There is, however, an alternative route.   This is using expert systems to enable experts to become more expert and use their knowledge more effectively.   Does anyone have any comments on this subject?   Are we once again falling into the trap of concentrating on the machine end of the design process and ignoring the difficult philosophical and ethical questions at the knowledge collection stage?

THE IFIP SYLLABUS

Lyn Antill has sent in the following valuable comments on the IFIP syllabus in relation to open-learning, something many of us will soon be encountering.

OPEN LEARNING AND THE IFIP IS SYLLABUS
Lyn Antill

Distance learning Unit
Polytechnic of the South Bank

There are 3 modes of learning :-
      Full time
      Part time
      Open

There are 4 levels of post school learning :-
      Technician
      Undergraduate
      Post-graduate
      Research

In addition there are two career points at which this learning can take place :-
      Pre-experience
      Post-experience

This syllabus was written with only one of these 24 combinations in mind. We are all 'experts' in education. Thus we all rely on recognising that a situation is of a certain kind and deciding the content/level/mode of presentation that is appropriate, and will automatically interpret the syllabus to match. This leads to lively discussions between different course directors on their implementation of a syllabus for which we have developed moderation proceedures.

However, when it comes to open learning few academics have any expertise In the U.K. we will have seen Open University programmes and even used them in class. However, very few of us have actually worked with the Open University and, therefore, few have first hand experience of this method of learning.

I have recently been transferred into the Distance Learning Unit at the Polytechnic of the South Bank. This was set up at the instigation of our director, Dr. J. Beishon, formerly Professor of Systems at the Open University. The DLU works alongside the Open College of South London which specialises in adapting college courses to students with non-standard requirements, particularly for people with experience but no qualifications.

2. The nature of Open Learning

I propose to start this paper off by painting a picture of the peculiar constraints and opportunities of Open Learning, and will then go on to a discussion of the way this syllabus might be appropriate in this situation.

   2.1. Open learning is almost always post-experience. The question is how relevant that experience is to the material. The distinction we draw from our part-time courses is between those working in computing and the rest. The rest would be directed to the full time course to get simulated experience in the classroom or to BTEC post-experience courses which would build on appropriate management/professional direct experience.

   It would seem appropriate that candidates for an open learning course based on the IFIP syllabus "would normally be working in Computing or in a computer related discipline". If not they would have to do some preliminary or additional work to provide them with simulated experience.

   2.2. Open learning students are particularly vulnerable to loss of motivation.

      - they have no 'investment' in the course other than the fees for the current unit.

      - they already have work and family commitments

      - they get no moral support from their fellow students. they do not have instant feedback on their performance or the chance to ask questions as they arise which are provided by tutorials.

      Administration arrangements (hot-lines, summer schools, local OU student clubs) can provide some of this but the primary need is for students to see the relevance of the material as it is studied.

2.3. Much more thought and effort has gone into the preparation of material and it is not possible to adapt material from year to year in the way that is normal in the teaching of a fast moving subject such as information processing.

3.4. How can we run group projects and action learning which are deemed to vital?

3. The type of students undertaking Open Learning in Information Processing

3.1. The first category are likely to be mature graduates or those of graduate equivalent status, already working in Computing. These would be one stage better educated than those on the MBA because they are already acquiring the necessary technical competence. Their academic requirements will be very similar to those of the MBA students.

3.2. People working in related professional areas wanting to get enough knowledge about Information Processing in order to make a sideways step. They will already be familiar with the nature of organizations and information flow, but may lack basic technical knowledge of computers. MBA level but with technical foundation courses.

3.3. Junior staff from other areas wanting to get into Information Processing as a career step up. These will be HND/BSc entry standard and would require considerable introduction both to computers and organizations before studying Information Systems. The Computing would be particularly difficult to arrange unless it was done on a personal computer. It might be felt that they ought to do some other course first but finding them a suitable course might be very difficult because very little is offered in this area.

4. The type of material to be studied

Many open learning students, because they are already working, will want to see the immediate relevance to them of the particular material they are studying. "Will it help me in my job?", "Will it help me get a better job?". Also they will inevitably interpret the material they are studying in terms of their own experience. Many will therefore reject discussions of underlying principles of future developments as this detracts from the time available for work that is more immediately beneficial. To some extent these people feel that they want training rather than education, also they usually need the difference between the two carefully explained to them.

Experience shows that such people will be intolerant of any material which does not further their interests, and many consequently reject the whole course. This is partly to do with the presentation of the material, but is also to do with our ideas of what Information Systems are about. i.e. the practitioner may give the impression that it is about clever techniques for getting information processed, rather than about the information needs of the organization or the roles of the people within the organization.

5. Conclusions

The syllabus is presented in a way that is supposed to be interpreted by people who are already 'experts' in teaching Information Systems to graduate students.

More needs to be made of the situations - practical and professional - in which open learning students find themselves. This also leads us to being more explicit about what we are trying to do for the graduate and undergraduate students, rather than taking certain academic models for granted.

More emphasis should be put, for the lecturers reading the syllabus if not for the students, on the purposes which are envisaged should be achieved by different people working through the material. These are the objectives of the course, or courses, and they specify what it is the student should understand or be able to do after completing the course.

NEWS OF MEMBERS AND FRIENDS

If you have any personal news which you would like the members of our Group to know about, please do send it to me.

NEW MEMBERS

Lyn Antill has become a member. She has attended two meetings of W.G. 8.2

NEW FRIENDS

These are: Peter Keen,
C/O. Nolan and Norton,
1, Lumley Street,
LONDON, W1.

David L. Damm-Luhr,
Research & Special Programs Administration,
US Department of Transport,
Transportation Systems Centre,
Kendall Square,
Cambridge, Massachusetts 02142, USA.

Jim Wood,
Department of Computer Science,
Brunel University,
Uxbridge,
Middlesex UB8 3PH.

Bernard Moulin,
Computer Science Department,
Laval University,
Pouliot Building,
Room 3505,
Ste-Foy,   Quebec
CANADA G1K 7P4

A. Metaxides,
AT & T Information Systems,
100 Atrium Drive,
Somerset,
New Jersey, 08873,
U. S. A.

Mauri Leppanen,
Institute of Computer Science,
University of Jyvaskyla,
Cygnaeuksenkatu 3,
40100 Jyvaskyla 10,
FINLAND.

Ir. B.W.L.M. Sessink,
Head of Research of Products & Processes,
OCE-Nederland B.V.,
St. Urbanusweg 43,
P.O. Box 101,
5900 MA Venio,
THE NETHERLANDS.

Drs. T. Achterberg r.a,
Vrye Universiteit,
Econonische Faculteit,
De Boelelaan 1105,
1007 MC AMSTERDAM,
THE NETHERLANDS.

NOTE: Please do not forget that we are a network and that this
Newsletter is dedicated to helping members of the network
communicate with each other.

Please do write in.

FINAL NOTE

In order to break even it looks as if we shall have to charge
around £130 for our conference on I.S. Research - a doubtful
science, 1-3rd September at Manchester Business School. This
would enable us to provide free accommodation to our speakers.
It would help the Committee to work out the cost if we knew
how many WG 8.2 members and friends will be coming. If you
have decided to come could you let Enid Mumford know as soon
as possible. Also, if you can suggest any firms who might
contribute, say, £100 in return for the Conference Proceedings,
please let me know.