# Members' Meetings for 1993/94

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday 12 October</td>
<td>Controlling end-user computing</td>
<td>John Sillitow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Woolwich Building Society</td>
</tr>
<tr>
<td>Tuesday 19 October</td>
<td>Discussion Group (Network Security)</td>
<td>James Hutt</td>
</tr>
<tr>
<td>(Full Day)</td>
<td></td>
<td>Lyn Lawton</td>
</tr>
<tr>
<td></td>
<td></td>
<td>John Sillitow</td>
</tr>
<tr>
<td>Tuesday 9 November</td>
<td>Automating software testing</td>
<td>Mark Gillett</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Direct Technology Ltd</td>
</tr>
<tr>
<td>Tuesday 14 December</td>
<td>Insuring computer-related risks</td>
<td>David G Davies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hogg Insurance Brokers</td>
</tr>
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**1994**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
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<tbody>
<tr>
<td>Wednesday 12 January</td>
<td>Legal aspects of document image processing</td>
<td>Chris Reed</td>
</tr>
<tr>
<td>IIJ Joint Meeting</td>
<td>Auditing aspects of document image processing</td>
<td>Centre for Computer Law Studies</td>
</tr>
<tr>
<td>Contact: D Baker</td>
<td></td>
<td>Ken Tombs</td>
</tr>
<tr>
<td>0494 776188</td>
<td></td>
<td>Independent Consultant</td>
</tr>
<tr>
<td>Tuesday 8 February</td>
<td>Access control</td>
<td>Dr Brian Collins</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PC Security Limited</td>
</tr>
<tr>
<td>Tuesday 22 February</td>
<td>Discussion Group (Quality Issues)</td>
<td>TBA</td>
</tr>
<tr>
<td>(Full Day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday 8 March</td>
<td>Viruses</td>
<td>Jan Hruska</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sophos</td>
</tr>
<tr>
<td>Tuesday 12 April</td>
<td>Annual Debate with the EDPAA</td>
<td>TBA</td>
</tr>
<tr>
<td>Wednesday 11 May</td>
<td>Annual Conference &amp; AGM</td>
<td>TBA</td>
</tr>
<tr>
<td>(Full Day)</td>
<td>(London Press Centre)</td>
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*Meetings are usually held at the Royal Institute of Public Health & Hygiene, 28 Portland Place, London W1N 4DE (Ground floor, Lecture Room 1), except as noted above. For last minute confirmation, telephone 071-580 2731 or 071-636 1208. Meetings start at 4.00 for 4.30pm, unless otherwise stated. Tea and coffee are available before each meeting; sandwiches and refreshments afterwards.

Details of discussions groups are forwarded directly to members as part of the quarterly mailing. Please contact Bill Barton on 071 872 6720, or Steve Pooley on 0580 891036, for further information.

For details of the annual conference please contact Paul Howitt on 0992 632222.*
My plea for more frequent use of electronic mail last issue has certainly paid dividends (one reader mailed me within a day or so of receiving the journal). Even more impressively, the keynote article in this journal was entirely requested, written, transmitted (from Australia), edited and submitted to the typesetters via electronic media.

This series of events was initiated by an e-mail request from me to George Mickhail at Sydney University for a paper in his specialist area. This article was needed in fairly short time, and George replied to me (again via e-mail) the next day. One week later he had transmitted the paper (about 5,000 words) to my mailbox. I used a utility called FTP (file transfer programme) to move this document from the unix based mail server to my PC. Although there were one or two problems with format codes and layout - George's PC uses Windows, mine is still a DOS dinosaur - it was a very straightforward task to edit and customize the paper. This was then copied to a floppy and the result is for you all to see in the journal.

Now FTP is not the easiest way of transferring text from PC to e-mail (when I was with the Woolwich we had a very neat utility to do this as long ago as 1989 - 90). But the thought of initiating, posting, editing and submitting for publication in less than a fortnight using any other method is unthinkable. From this experience, I would like to set a challenge: if anyone has anything they wish published in the journal, send it to my mailbox and it will be published in the next issue (subject of course to my editorial prejudices!).

***

In keeping with the positive attitudes of the Group, there is now a special low cost option for student membership. Please pass this good news to any student acquaintances and relatives; computer auditing is a very useful skill even if their eventual career path is in mainstream computing or business. If any reader has connections with educational institutions through their work, or by teaching evening classes and training courses, I would be glad to hear from them so that copies of the journal and other information can be passed on.

***

This year's programme of discussions and conferences is now complete, and what a good year it was. In very trying times, with recession and redundancy threatening many of our group, the organizers of the events managed to produce some very positive speakers and many very lively debates. Next year looks just as interesting, why not tell your colleagues and employers about it? There are always spare copies of the journal available for potential members.

ROB MELVILLE
PRINCIPAL COMPUTER AUDITOR

Bucks To £25,000 + Bens
Our client, a very successful international financial organisation is currently seeking to recruit an articulate, well qualified computer auditor with 2 years experience of Application and Installation reviews on large systems, preferably IBM, UNISYS, MAINFRAMES and also a background in reviewing Systems under Development and Security would be desirable.

UTILITIES

UK Wide To £35,000 + Bens
Our client, a leading international consultancy specialising in the Electricity and Water industries is seeking to recruit a number of Auditors with extensive PC/LAN Audit skills. The successful applicants will be self motivated, enthusiastic and fully PC literate with programming and analysis abilities. Excellent communication and presentation skills are also essential.

SENIOR COMPUTER AUDITOR

South East To £25,000 + Bens
This multinational plc currently undergoing major expansion in its EDT Audit department is seeking to recruit an EDP Auditor with a minimum of 18 months experience, carrying out reviews on a variety of applications and installations (preferably IBM mainframe). Some exposure to auditing systems running under development is of particular interest.

AUDIT YOUR BANKER

City To £30,000 + Bens
Our client, an international merchant bank is currently seeking to recruit a Chartered Accountant with a minimum of 2 years EDP Audit expertise. You will be directly responsible for carrying out audits throughout the UK and Europe on a variety of applications. Ideally you have banking expertise and are under the age of 30.

COMPUTER AUDITOR

Scotland To £22,000 + Bens
This major plc with its large IBM mainframe installation requires an EDP Auditor (preferably QIQA or CISA qualified) to perform system under development reviews, and to get involved in the planning and management of a variety of audits throughout the organisation. Excellent career prospects are on offer.

COMPUTER AUDITORS

Move Into Consultancy

UK Wide To £30,000 + Car
This leading consultancy is currently undergoing major expansion throughout its UK Computer Audit Services division. They require Graduates with an accounting or DP background who have a successful 18 months EDP audit track record. The applicant’s experience should include reviewing systems under development. This company will allow you to broaden your EDP audit skills through the variety of assignments it has to offer.

PC LAN AUDITS

City To £35,000 + Bens
Expanding EDP Audit team within this international bank requires a graduate Chartered Accountant with 2 years EDP Audit skills. The successful applicant must be able to demonstrate a track record reviewing PC LAN systems. Excellent career prospects and benefits package are on offer.

SYSTEMS DEVELOPMENT AUDITORS

Midlands To £25,000 + Bens
This leading financial services organisation requires computer auditors with a solid track record reviewing systems under development. The hardware environment is IBM AS400 and applications are financial. This company offers excellent opportunities to study either for the QIQA or CISA qualifications.

NORTH WEST OPPORTUNITIES

Computer Auditors To £25,000 + Bens
We have currently been retained by a number of blue chip companies in the North West who are interested in recruiting qualified Chartered Accountants or DP professionals with a minimum of 18 months EDP Audit experience. Your audit background should encompass a range of skills including application and system under development reviews on mainframe or PC hardware. Fast track career progression is on offer to the successful candidates.

CONTRACTS! CONTRACTS!

Nationwide Excellent Rates
Have you audited the following systems?
* Billing * Stock Control * Payroll * Email * Unix
If so, then contact one of our consultants NOW!

The first step towards your next career move should be to contact Sean Farrell on 071-454 9010 (till 5.30 pm) or 081-318 4521 evenings/weekends. Send a full cv to Michael Bailey Associates Ltd, Rococo House, 281 City Road, London EC1V 1LA, Fax: 071-490 3361
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<td>George Mickhail 10</td>
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<td>Minutes of the CASG AGM held 12 May 1993</td>
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<td>Back cover</td>
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Chairman’s Corner

John Mitchell

We are now at that time of the year when we are preparing ourselves for the excesses of next season. Elsewhere in the Journal you will find a programme card and, more importantly from my point of view, an invitation to renew your membership. You will notice that our subscriptions have increased, but we are still far cheaper than other professional groups and the discounts that we offer far exceed, by a couple of hundred pounds, the cost of membership.

The increase is our first in three years and only our second in the last seven, and, as before, we do not wait until we are in trouble, but try to head it off before it happens. Our operational costs now exceed our membership income and the drop in interest rates has hit our investment income. We believe that prompt action now will prevent heartache in the future, so please believe us when we say that the pain is necessary.

In exchange, we offer you a quality meeting programme and a superb Journal. Whatever happens we intend to maintain our traditionally high standards.

* * * * * *

The annual debate with our colleagues from the EDPAA was very enjoyable. The motion that ‘this house considers that contracting out internal audit is a good idea’ was, roundly defeated (3 in favour, 12 against and 2 abstentions). The final result contrasted markedly with the pre-debate vote where the figures were much more finely balanced (7 in favour, 7 against and 3 undecided). The debate was robust, informative, amusing and entertaining and great credit must go to the teams for their presentations. Well done Derek Oliver, Ragu Iyer, Bill Barton and Steve Bones for a most enjoyable evening.

* * * * * *

I wish you all a very peaceful summer and look forward to meeting many of you at our meetings next season.

Membership Renewal

Some of you reading this edition of our Journal will not have renewed your subscription for next season (subscriptions are due in August of each year). Others of you may be unsure whether you have renewed, or not. If you are in this last category, please contact our membership secretary, Jacqui Race, at the Stock Exchange on 071 797 3551 to establish the current situation.

If you have not yet renewed your subscription, I urge you to use the renewal form that you will find elsewhere in this Journal otherwise you will lose out on the significant benefits of membership. These include:

- free attendance at our late afternoon meetings
- free quarterly journal
- 20% reduction in the subscription price of the Computer Fraud and Security Bulletin
- 20% reduction in the subscription price of Computers and Security
- a saving of at least £75 on our own Annual Conference
- 25% reduction in the subscription to the Quality Software Report newsletter
- discounts on attendances at many other conferences and training opportunities
- the opportunity to take part in our twice yearly Discussion Group

As Corporate membership costs only £75, you will realise that membership of the Group can actually save your organisation many hundreds of pounds each year.

➤ RENEW NOW TO RETAIN THESE IMPORTANT BENEFITS ➤
Introduction

Five years have now passed since I first had the honour to address you as chairman of this group. During that time, the foundations laid by my predecessors have been consolidated and expanded by the hard work of your Management Committee. Unlike many other professional groups, ours is still on a firm financial footing and this report is really a tribute to the members of the committee who have made this possible.

Management Committee

Your management committee comprises four elected positions (chairman, secretary, treasurer and auditor), as required by the rules of the BCS, and a number of co-opted volunteers. The chairman is required to be a BCS member and it is desirable that the other elected officials, with the exception of the auditor, are also members, although there is some flexibility on this point.

There were a few changes to the committee membership during the year, due to changes in members' personal circumstances and two members have indicated that they will be unable to serve next season. Chris Birt, who has helped to organise our Discussion Group and Ian Longbon who has organised our Annual Conference for the last three years have had to relinquish their responsibilities. I am sure that you will join me in my thanks to them and wish them every success for the future.

The list below shows the committee for next season. As you notice, each member of the committee has a defined responsibility and where possible there is some "shadowing" of roles to cater for the invariable moves that take place where professional people are concerned.

Elected Officers

Chairman: John Mitchell Little Heath Services
Secretary: Raghul Iyer KPMG Peat Marwick McLintock
Treasurer: Fred Thomas Retired Consultant
Hon. Auditor: Tony Locke Day Smith & Hunter

Members & Associated Responsibilities

Meetings
John Bevan Audit & Computer Security Services
Meetings
Alison Webb Independent Consultant
Press & PR
Jarlath Bracken Zurich Insurance
Membership
Jacqui Race The Stock Exchange
Journal
Rob Melville City University
Discussion Group
Steve Pooley Independent Consultant
Discussion Group
Bill Barton The Rank Organisation
Conference
Paul Howitt Tesco Stores Ltd
Publications
Nigel Smith NJ Associates

Finances

The report from Fred Thomas, our Treasurer, shows that although we are financially sound, we are not covering our operating costs. This, together with our fall in investment income has forced us to propose a motion to increase our subscriptions. This is the first increase for three years and only our second in the last seven, so please believe us when we say it is necessary. At this stage I must add a word of praise for Fred Thomas our astute Treasurer, who is without doubt the best Specialist Group Treasurer in the BCS.

Membership

Our membership records, which have been ably maintained by Jacqui Race and her computer tells us that we currently have almost 400 members; a pleasing near doubling of our membership in the last four years. An analysis of the membership shows:

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</thead>
<tbody>
<tr>
<td>Corporate</td>
<td>191</td>
<td>224</td>
<td>245</td>
<td>195</td>
<td>140</td>
<td>139</td>
</tr>
<tr>
<td>Individual BCS</td>
<td>64</td>
<td>63</td>
<td>57</td>
<td>45</td>
<td>33</td>
<td>35</td>
</tr>
<tr>
<td>Individual Non BCS</td>
<td>100</td>
<td>106</td>
<td>78</td>
<td>61</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>355</td>
<td>393</td>
<td>390</td>
<td>301</td>
<td>207</td>
<td>211</td>
</tr>
</tbody>
</table>
External Audit 26 42 48 47 41 38
Internal Audit 277 309 290 214 130 151
Other 52 42 52 40 36 22
355 393 390 301 207 211

The drop in numbers is disappointing, especially as it is in the corporate category. Although this may not be unexpected in recessionary times, it does raise the question as to whether organisations take seriously the need to control their I.T. environment.

I still have my own personal goal of 500 members, but that still looks a little way off, despite the value and quality of the service we offer to members.

Discussion Groups
Two Discussion Group meetings were held during the year; the first discussing the advantages and disadvantages of the differences between the systems based audit approach and substantive testing and the second with computer insecurity. Steve Pooley and Chris Birt were responsible for the exemplary administration in both cases.

The format is to have four sessions, each of which is addressed by a speaker for about 30 minutes, followed by about an hour discussion. We limit attendance to keep the meeting small enough to ensure that discussion actually does take place.

Both meetings were well supported, even though we make a charge to cover the cost of accommodation and refreshments.

Meeting Venue
Our regular and popular venue, at the Institute of Public Health and Hygiene in Portland Place, has served us well and we will be continuing our use of these facilities for next season.

Member Meetings
The annual meeting programme was ably handled by John Bevan and Alison Webb. The subjects covered, including our annual conference and two discussion groups, were as follows:

1992 Subject No. of Attendees
6th October EDI Security & Audit 25
22nd October Systems Based v Substantive Audit (Discussion Group) 40
10th November TickIT Auditing 27
27th November Facilities Management (Joint with IIA Midlands) 32
1st December Outsourcing Computer Audit 18

1993
13th January Controlling IT (Joint Meeting with IIA) 43
9th February Mainframe to Micro Security 25
23rd February Computer Insecurity (Discussion Group) 38
9th March Annual Debate (Joint Meeting with EDPPA London) 20
13th April UNIX Network Security 27
12th May System Integrity (Annual Conference) 20

On average, the attendance at our meetings is up on last year which is pleasing in view of the effort and cost involved in running them.

The Journal
Under Rob Melville's stewardship, our main communication arm with our membership goes from strength to strength and it has become the envy of other Specialist Groups within the BCS. For those members unable to attend our meetings it provides valuable information at both a practical and theoretical level on computer audit and control matters.

Contributions from our members still provides the main material and I hope that more members will consider sharing their ideas and experiences in this way.

Other Publications
We are now receiving royalties on our book Control and Audit of Databases, which was produced as a joint effort with the Data Management and the Security specialist groups. We are also receiving a steady income from Malcolm Lyndsey's superb booklet on Auditing the AS/400. Thank you Malcolm.

Annual Conference
Our most recent conference, held in May of this year, was well organised by Ian Longbon and Paul Howitt and was on the subject of System Integrity. Attendance was disappointing and we made our first conference loss in over fifteen years. A sign of the recession perhaps, or are our discussion group activities eating into our conference attendance? This is something we will be looking at very closely during the next few months.

Liaison with the BCS
Our relationship with our parent body has improved over the last year and there is no doubt that they have a sneaking admiration for our professional approach in running what is a very successful small business. Small things, such as their attempt to enforce
counter-signing of our cheques, continue to rankle, but on balance we manage to keep a professional relationship with BCS Headquarters.

External Relations

Our annual joint meeting with the Home Counties District of the Institute of Internal Auditors was its usual success and we also held our second joint meeting with the Midlands Chapter of the IIA in Birmingham, although as previously, very few of our own members actually turned up. Based on our experiences over the last two years we now believe that we have firm evidence that there is no great demand for meetings outside of the London Area and we will therefore not be repeating the exercise.

We still enjoy good relations with our “sister” organisation, the EDPA, and we work closely together to avoid duplication of subjects. We had our first joint meeting in the form of a debate on the subject that “this house believes that contracting out internal audit is a good idea”. An enjoyable and lively debate took place between the two mixed teams who had volunteered to debate the motion with the final vote being a resounding defeat for the motion. The whole evening was so enjoyable that we have agreed to repeat the exercise next season.

During the year, members of your committee also addressed the EDPA’s European Conference and various BCS promotional meetings. This formed part of our policy to take every opportunity to increase the visibility of the Group.

Conclusion

The past year has been a year of great progress which has only been achieved due to the hard work of your management committee. I would like to propose a vote of thanks to them on your behalf, but more especially on my behalf, as without their generous help and support my job would be impossible.

John Mitchell
12th May 1993

Guidelines for Potential Authors

The Journal publishes two types of article: refereed and invited. Refereed articles should be technically oriented, and based on current or future issues related to computer audit, security or control. This type of article will be reviewed by at least one member of the editorial panel (anonymously). If published, it will be identified as a refereed paper.

An invited article need not be technical or overly academic (even Computer Auditors have a sense of humour!). In fact it need not even be ‘invited’. Submission without invitation is encouraged and although this may lead to severe sub-editing by the Editor, submission will virtually guarantee publication.

We also invite members to volunteer for book, product and course reviews (anonymously if required).

Why not call Rob Melville at CUBS (071 477 8646) to discuss how you can get your name in print?

ADVERTISING IN THE JOURNAL

Reach the top professionals in the field of EDP Audit, Control and Security by advertising in the CASG Journal.

Our advertising policy allows advertising for any security and control related products, services and jobs.

For more information, phone Rob Melville on 071 477 8646.

YET ANOTHER DISCOUNT

We have arranged for our members to receive a 15% discount on the price of a one day pass to the IBC Conference on “Exploiting New Technology for Competitive Advantage”. You will see from the enclosed brochure that this represents a substantial saving on the normal price of the conference and once again illustrates that membership of CASG pays for itself many times over.
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 30TH APRIL 1993

RECURRING ACTIVITIES

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<thead>
<tr>
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<tbody>
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<td>Subscriptions</td>
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<tr>
<td>- Corporate Members</td>
<td>54</td>
<td>67</td>
<td>71</td>
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<tr>
<td>- Individual Non BCS Members</td>
<td>114</td>
<td>103</td>
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<tr>
<td>- Individual BCS Members</td>
<td>66</td>
<td>61</td>
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<tr>
<td>BCS Allocation (Office Services)</td>
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<td>Interest on Bank Accounts</td>
<td>1312</td>
<td>1615</td>
<td>2320</td>
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<tr>
<td>Discussion Days</td>
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<tr>
<td>- Net Income</td>
<td>£2570</td>
<td>£1676</td>
<td>£1580</td>
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<tr>
<td>- Less Net Expenditure</td>
<td>2477</td>
<td>1417</td>
<td>259</td>
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<tr>
<td>Sundry Income</td>
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<tr>
<td>Joint Meetings (Share of profits)</td>
<td>51</td>
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<tr>
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<td>6704</td>
<td>2763</td>
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EXPENDITURE

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<tr>
<td>Members' Meetings</td>
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<tr>
<td>- Hire of Halls</td>
<td>£435</td>
<td>£390</td>
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<tr>
<td>- Speakers' Costs</td>
<td>£280</td>
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<tr>
<td>- Audio Visual Aids</td>
<td>60</td>
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<td>- Refreshments</td>
<td>£651</td>
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<td>Programme Cards</td>
<td>935</td>
<td>984</td>
<td>814</td>
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<tr>
<td>Administration</td>
<td>614</td>
<td>632</td>
<td>392</td>
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<tr>
<td>Journal (Net cost)</td>
<td>3666</td>
<td>2365</td>
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<tr>
<td>Development Project</td>
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RECURRING ACTIVITIES SURPLUS/(DEFICIT)

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<tr>
<td></td>
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SPECIAL ACTIVITIES

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<tbody>
<tr>
<td>CONFERENCE - Income (net)</td>
<td>£5489</td>
<td>£5428</td>
<td>£4070</td>
</tr>
<tr>
<td>- Expenditure (Net)</td>
<td>£3944</td>
<td>1545</td>
<td>£3350</td>
</tr>
<tr>
<td>SALE OF BOOKS - Income and Royalties</td>
<td>£358</td>
<td>£337</td>
<td>£35</td>
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<tr>
<td>- Expenditure</td>
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<td>240</td>
<td>£21</td>
</tr>
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<td>1257</td>
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SPECIAL ACTIVITIES SURPLUS/(DEFICIT)

<table>
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<tr>
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<tr>
<td></td>
<td>£3042</td>
<td>£2394</td>
<td>(55)</td>
</tr>
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OVERALL - SURPLUS

<p>| | | | |</p>
<table>
<thead>
<tr>
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<td>Fund Balance 1.5.92</td>
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<tr>
<td>Add 1992-93 Surplus</td>
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<td>Fund Balance 30.4.93</td>
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<td>A.J Thomas</td>
<td></td>
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Represented by:
- Cash at Bank and on Deposit 30.4.93 | £33687
- Acreuals, Advance Receipts & Creditors 30.4.93 | (£3409)
- Payments in Advance and Income due 30.4.93 | £1338
- £31616
Your chairman managed to spirit away the following top secret document from NATO headquarters. Please eat it after memorisation so that you can counter any gobbledygook from I.T. people with some of your own!

NATO COMPUTASPEAK by MWGS Staff EGUERMIN, OSTEND

6502 – The year you will finally pay off your computer.
6800 – The year you will finally pay off your peripherals.
BASIC – Computer language used for generating errors. Most billing programs are, apparently, written in BASIC.
BATCH PROCESSING – Making lots of cookies at once.
BCD – Three of the first four letters of the alphabet.
COBOL – Far better than MOBOBOL.
COMPONENT – Part of a computer, usually forgotten when the machine was sold to you, that cost extra.
CRASH – Normal termination.
EBCDIC – Security code for IBM computers. Means “Erase Backup, Chew Disk, Ignite Cards”. For a variety of obvious reasons, only IBM computers use EBCDIC code.
EXECUTION – What your computer did to your program, also known as murder.
FORTRAN – A high level computer language used by those who have mastered BASIC syntax errors and are looking for a challenge.
INSTRUCTION – A suggestion made to a computer.
KEYBOARD – The most important part of a computer. Resembling a typewriter, a keyboard is used for entering errors into a computer.
LOOP – (see LOOP).
MANUAL – A handy book, to be used as a guide to your computer, software and peripherals. It is usually a photocopy of some hand-written notes, and tells you how to use the manual and not how to use the computer, software or peripherals.
NULL STRING – The result of a four hour sort.
RESET – Another method of ending four hour sorts.
REDUNDANCY – Keybbounce.
SCREEN – A wire mesh which protects the computer from the programmer.
SCROLL – What the instructions do when you are trying to read them.
SPECIAL CHARACTER – One of the characters used in computer expressions, like & $ % £ and , as in the famous expression “&$%£”.
STAND ALONE – What happens to a programmer who starts talking about computers at a party.
SAVE – What you should do before you buy a computer.
RESERVED WORDS – All the good ones that you wanted to use.
SNOBOL – Computer language used in cold climates.
OFF-LINE – A computer joke in bad taste.
ON-LINE – A computer joke in good taste.
PERIPHERAL – Something attached to your computer with wires, cables or chewing gum, such as the case, the monitor, whips and chains, dynamite and other programming aids.
ERROR – A programmer’s decision to skip making a flowchart and exclude comments.
OBJECT CODE – Reason given by computer as to why it won’t run a program.
BOOT – Good way for ending four hour sort.
CHIP – Used in computers, they come in four flavours: silicon, potato, chocolates and buffalo.
DOCUMENTATION – Instructions which come with hardware or software and explain how much more money you will have to spend in order to get your hardware or software to work.
I/O – Abbreviation of the phrase used by programmers which they watch their programs, known in full as “Aaaaaaaiiiiiiiiiii Ooooooo0oo0000000oh…!
MIPS – Meaningless indicator of processor speed.
BULLSHIT – Biggest United Liaison of Leading Suppliers of Hardware Innovative Technology.
PACMAN – Patently Waiting Computer Manufacturer’s Arrival News.
BOOK REVIEW

TITLE:
Data Protection & Security
For Personal Computers

AUTHOR:
Robert Schifreen

PUBLISHER:
TTK Technical Publications Ltd (081 995 9845)

PRICE: PAGES:
£145.00 327

This book is sub-titled "a management guide to security for personal computers and local area networks", but I believe that its target audience is really much wider than that implied in the sub-title. Mainly because Mr Schifreen uses the word "security" in its wider sense to embrace integrity and availability, rather than simply confidentiality.

Now I have long argued against us computer auditors using the wider definition, as I believe that it clouds the issue between control and security, but perhaps this is a personal idiosyncrasy that I will have to overcome as everyone else seems to expect security to include everything. I would have been much happier if Mr Schifreen had used the word "control" rather than "security", but he has not and the resulting book is none the worse for it.

The book is sensibly structured, easy to follow and avoids any sensationalism; which some readers who know Mr Schifreen's background may find surprising. His starting point is an evaluation of the likelihood of the potential threats, followed by an introduction to risk analysis, before moving into an explanation of the PC itself. All this is clearly explained and helps to set the scene for the real meat which includes chapters on hacker motivation, management tasks, creating a security policy and what to do if you suspect a breach.

Various sections then deal with the role of the security manager, the different types of back-up, viruses, access control and software piracy. The author then moves onto LANs, encryption, software development, trouble shooting and network considerations. There is a handy chapter on legislation and a section called the "resource guide" which provides a useful reference to many products and provides useful addresses and telephone numbers. The table of contents makes it easy to find a particular section and the index is sensibly structured and simple to use.

I found the book a very useful addition to my library and having everything in one place certainly makes it a useful tool for the busy auditor. However, in view of the progress of technology, I wonder whether Mr Schifreen would consider offering a regular upgrade service in order to keep it up to date in the future!

John Mitchell

Review of Audit Conferences Europe
Audit Automation Conference, 1993
Rob Melville

This three day conference was targeted at auditors (internal and external) who wished to gain practical knowledge of the state of the art techniques for automating their audits. Conference literature made it plain that a major selling point was value for money, and indeed its price was very reasonable compared to its competitors.

So was it worth attending? If I were the Head of Audit, and had sent my staff to gain a good grounding in computer audit techniques for an economic price, the answer is an unqualified yes. But if I were a senior auditor, using up precious conference time, then my answer would be more guarded: too many of the sessions were either too specific (such as VME) or too general (like the quality debates). Overall there was much more to applaud than to criticise, and the networking (in the human sense of the word) was excellent; lots of enthusiastic auditors mingling with some very useful speakers and exhibitors.
Letter from a reader:

Dear Rob,

Computer Audit Training and Qualifications-
Article by John Mitchell in the Spring '93 CASG
Journal

I have just read the above article in the Journal
and thought that I must write to express my views on
its contents, I presume you may have anticipated
some response from your comment in the Editorial.

Qualification in Computer Auditing (QI CA)

My first point concerns the understatement and
misrepresentation of the QI CA qualification.
A qualification cannot say that it will help you to
become something. It is awarded in recognition of
the fact that you have attained a required level of
learning and experience (if necessary to obtain it).
The 'mistake' in insisting on completion of a course
of learning approved by the IIA helps specify the
learning requirements in becoming a computer
auditor. It also ensures that the learning results in a
demonstrably high level of learning to a national
standard by examination. An additional point
relating to QI CA is that it also ensures a breadth of
coverage, by requiring that the three (not two!) years
of logged and certified experience relate to a range of
IT audit areas (operating systems, PC's,
Communications, etc.). The 'couple of computer
audit and one management related' set of papers
required for this qualification are based on a broad
syllabus and take 9 hours to complete, rather longer
than the 'one day' CISA examination. (I am not
aware of the level of management theory and practice
are included in the CISA examination, and therefore
cannot comment on the EDPA's testing of this
crucial area of auditor development.)

The 'dot' model is therefore deficient in that, in
relation to 'I.T. KNOWL' for QI CA, it represents
the level of knowledge of an entrant to the
programme, not the level required to gain the
qualification. A quick look at IIA papers 4 and 6c will
reveal that superficial knowledge will not be
sufficient to gain a pass on either paper. (Results
relating to paper 4 - the basic computer audit paper
by non-computer audit candidates bear this out).

International recognition for QI CA is achieved
through the affiliation of IIA-UK with other
international IIA bodies throughout the world, the
IIA-UK being a leading body in terms of membership
and auditor development.

The low number of people who can use the
designatory letters may be due to the fact that this is
a very new qualification (in relation to CISA) and is
not easy to attain due to stringent experience
requirements and rigorous examinations. From day
one there was no attempt to boost numbers by saying
that all those who had been in 'computer audit' in all
its various guises for x years 'must have reached the
standards required'. My belief is that, like the MIIA
diploma itself, the recognition of the quality of the
candidates produced by this programme will grow as
the holders go out and 'do their stuff'. (I am also
biased - see below!)

The 'commitment' of CISA candidates (1 day and
no formal course of tuition) was recognised. I would
suggest that there is equal commitment displayed by
QI CA candidates who volunteer for the formal
tuition and triple examination torture of the IIA.

Member of the British Computer Society

My second, shorter point, concerns the MBCS
references in the article. The qualification, by
examination and experience, is the MBCS. The
'higher' (senior?) letters - FBCS - are awarded to
members who are at least 30, with a minimum of 8
years practical experience in IT (5 of the 8 in a
position of eminence or authority) and sponsored
appropriately, thus not by examination and therefore
not the MBCS which the earlier parts of the article
refer to. The quote given towards the end specifically
refers to the 'Fellow' designation and bears no
resemblance to the MBCS students (majority under
30) who took part in the course of study with me. The
combining of MBCS and FBCS in references under
the quote at the end of the article is therefore
particularly misleading.

Conclusion

If this article was penned as an unbiased,
informative view on the subject I do not believe it
succeeded. The bias towards CISA is apparent
(though admitted by the author mid-way through),
whilst the potential understatement of the
requirements of the QI CA qualification is also
significant. If, on the other hand, it was intended to
generate correspondence on this subject it succeeded
-well done!

Yours sincerely

Brian Selby MIIA, MBCS, QI CA
Cannock
Computer Audit Duality

George Mickhail
Faculty of Economics
The University of Sydney
N.S.W. 2006 - Australia

ABSTRACT

This paper considers computer auditing as an area of practical knowledge that lends itself to several disciplines: philosophy, accounting, auditing, and information systems. In our role as interdisciplinary practitioners and researchers, we should draw upon knowledge and experience from other related disciplines to provide us with an insightful understanding of our own.

The main concern within computer audit is to make sense of and evaluate the human-computer interaction. This interaction can be seen in terms of the mind-body problem or duality, which has long been a concern of philosophers. The problems identified with it may prove to be useful in giving an insight to problems in computer audit.

Analysis is based on computer audit duality problems. The critique provides an enlightenment of how to interpret the socio-technical inscriptions present within a computer audit situation, coupled with a semiotic application to its inherent problems, and aims to provide a different view of computer audit approaches and computer audit in general.

Key Words
accounting, auditing, computer audit, enlightenment, information systems, philosophy, semiotics.

Introduction

The interface between humans and machines can be described as a socio-technical interface where humans and machines communicate. This socio-technical interface presents us with a modern formulation of duality or the mind-body problem. Drawing upon philosophy and its wealth of experience may ssist in examining the mind-body problem, an understanding of the socio-technical interface and its interrelated communication problems.

Communication consists of elements which we can analyze in terms of a continuum: from context through meaning, syntax and code. An act of communication is successful when the intentions of the sender are understood by the receiver. When humans try to make sense of their own reality or simply of what exists, they are merely describing their own interpretation of what they perceive to exist. Humans use their own way of communicating to describe themselves and to realise their own world. They use language - a system of signs - to represent what they perceive to exist and communicate to one another.

‘Information’ is a widely used term in many fields and contexts. It has come to mean all sort of things, and is often used in a careless or imprecise manner. Information offers a basis for studying organisations; widespread human communication (signification) problems and the role of computers in mechanical manipulation of signs from a common perspective.

Semiotics (the theory of signs) is an established area of study which can provide a common framework for the interpretation of human and computer based signs. This paper attempts to explain the socio-technical interface duality using a semiotic framework. I have provided an interpretation of the socio-technical inscriptions as follows:

- an outline of the socio-technical interface
- an analysis of the socio-technical interface duality in a computer audit context
- an interpretation of what I see as the socio-technical inscriptions

Socio-Technical Interfaces

The interface between a human and a computer can be described as ‘that part of a system that the user comes in contact with physically, perceptually or conceptually’ (Moran, 1981). For the purpose of this paper, I would like to refer to this interface as the socio-technical interface (Fig.1).

On one side of the interface I am concerned with the human or the social aspect; on the other side, my concern is with the total Computer Based Information System (CBIS), including models and structures, assumptions and values, embedded in the CBIS, rather than just the machine itself (Hirschheim et al, 1989).

FIGURE 1 - SOCIO-TECHNICAL INTERFACE
In a Computer Audit context, computer auditors should be able to define their own reality. That is, what are the different socio-technical interface(s) within the client’s system? How many interfaces are there in the client’s system? Why should we identify and classify these interfaces according to a certain way?

**Duality of the Socio-Technical Interface**

**General View of Duality**

Duality or the mind-body problem has been a major concern of metaphysicians, especially since the rise of modern philosophy in the seventeenth century. On one hand we have the mind which is the mental state of our existence and the body which is the physical state of our existence. The mental state is trying to make sense of our physical state and is trying in some way or another to rationalise the interaction with it. Hence it creates and offers us what we can refer to as the mind-body interface. This interface represents the perceptual interactions between each of these two interrelated problematic states of our existence.

In a way, the socio-technical interface portrays duality in a modern setting. On the one hand we have the mind or the social aspect of the interface and on the other we have matter or computer technology. Duality (Sprague, 1978) in its broadest sense involves answering two questions:

- what is the fundamental nature of mind and body?
- how are mind and body related?

Russell (1967) argues that what we know about mental and physical events might well lead one to suspect that the most general characteristics of each are different from one another, and yet that they seem to bear some relation to each other, or some influence upon one another.

When something happens in the physical world of the CBIS, this affects the world of the social system, and may change one’s thoughts, wishes, etc. Similarly, a desire that one may have can alter events in the physical world of the CBIS, as when one decides to change what is being stored inside the CBIS: information. More particularly, it can afflict an unauthorised change to the events in the physical world of the CBIS; ie, by computer abuse.

**Computer Audit - A Case for Modern Duality**

Computer Auditing functions in a way that can be described as a field that ‘seeks an understanding of socio-technical systems inscriptions’, where humans and computers interface and interact in a human based activity that is being examined by human auditors. A human activity involves more than what can be captured, represented and manipulated by quantitative measures. It involves an exchange of an interest based on an intention through an act of communication.

Duality of the socio-technical interface within a Computer Audit context may involve answering the questions ‘what is the impact of the social system on the technical system?’ and ‘what is the impact of the technical system on the social system?’ This can be demonstrated in the following diagram (Fig.2):

**FIGURE 2 - SOCIO-TECHNICAL INTERFACE DUALITY**

It is fundamentally important to realise that it is the social system that is trying to find a rationale to make sense of the physical system not the other way round. In other words, the social system should be the focal point of any investigation that would address the interface. It is from the perspective of the social system that we are questioning and addressing the interface.

Computer auditors study, assess and evaluate computer based information systems (Fig.3). A computer based information system is another form of a socio-technical system, where humans as accountants or accounting clerks input and retrieve data to and from the accounting information that is being processed in the computer. So they are inflicting a change to the physical world of the computer and getting affected by the changes that they have caused in the first place.

**FIGURE 3 - COMPUTER AUDIT AS A SOCIO-TECHNICAL SYSTEM**
These two relationships (HUMAN -> CBIS & CBIS -> HUMAN) provide us with the duality problems, that we are supposed to make sense of in our own way as Computer Auditors. Both of these relationships comprise our concern within the course of an audit. Auditors will be concerned in locating the socio-technical interfaces that portray this form of duality and plan the audit to address the different problematical issues that are associated with their duality.

In addressing a dual relationship, we are concerned with what exists in the auditee's socio-technical interface, that is the relationship between the humans or the auditee’s employees that interface with the auditee's CBIS. This group of humans should be considered in terms of the dual relationship between themselves and the CBIS that they interface with. The duality of the relationship incorporates two aspects that are of particular importance to the auditor:

(i) who are the humans that can inflict a change to the AIS?

Here the auditor will be concerned with the people that can directly or indirectly inflict a change to the system. These may include: programmers, system administrators, accountants and accounting clerks that affects the CBIS or are the agents of change within the CBIS. Their roles may be considered in terms of their intentional states of action, by which is meant their intentional states of action, their formal and informal ability to inflict change upon the CBIS.

Formal Systems, Informal Systems and Change

Change (Fig.4) may occur because of the formal system's (Organisational) rules to force it upon the AIS at a certain time e.g., update an employee pay record in the employees database at the end of the week, or because of the informal system's intention in inflicting it e.g., destroy the employees database or perhaps update the database with fictitious information.

<table>
<thead>
<tr>
<th>FORMAL AIS</th>
<th>INFORMAL AIS</th>
<th>ACCOUNTING INFORMATION SYSTEM</th>
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<tbody>
<tr>
<td>BUREAUCRACY WHERE FORM &amp; RULE REPLACE MEANING AND INTENTION</td>
<td>SUB-CULTURE WHERE MEANINGS ARE ESTABLISHED, INTENTIONS UNDERSTOOD BELIEFS, COMMITMENTS AND RESPONSIBILITIES ARE MADE, ALTERED AND DISCHARGED</td>
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(FIGURE 4 - FORMAL SYSTEM, INFORMAL SYSTEM & CHANGE)

A Formal System can be thought of as the bureaucracy where form and rule on how to inflict change to the AIS, are being laid by the auditee’s organisation. The auditor’s concern within such a system is to assess whether the auditee’s employees are functioning within the formal system, i.e., they are following the rules on how to inflict change to the AIS.

On the other hand, an Informal System may be described as the tendency of humans within the formal system to interpret the formal rules and regulations according to their own sub-culture where meanings are established, intentions understood, beliefs, commitments and responsibilities are made, altered and discharged. In doing so, they present the auditor with the informal system that requires sufficient consideration in addressing why the formal rules have not been followed, why certain controls are there, why other controls should have been there.

(ii) who are the employees that will be influenced by the changes made to the AIS

In this case, the auditor is concerned with the people that are directly or indirectly interested in the system. These may include: executives, administrators, accountants, accounting clerks that are affected by the CBIS. Humans tend to resist change especially if it threatens their existence or the way they are. It is often the case that individual interests might not coincide with group or organisational interests. Their roles may be considered in terms of their intentional resistant states of action. I mean by intentional resistant states of action, their formal and informal ability to inflict resistance upon the CBIS change agents or factors. This can take several forms: claiming inadequacy of the information provided by the CBIS, continuous complaints about the CBIS inability to provide politically correct information.

Resistance to change may be viewed in a similar way as individuals response to change. The above diagram, Fig.4, outlines and explores the formal and informal interrelationships within an organisation. At a formal level, resistance may take the form of obstructing the introduction of new automated modules by discrediting their effectiveness and efficiency factors. At an informal level, employees may consider the introduction of a new computer system as a threat to making some of them redundant, so they may resist its introduction by all available means.

In considering both of the above questions, the auditor will be in a position to address the accountability of both of these groups of humans within the auditee’s CBIS. Accountability in the sense of who is doing what with the AIS, and who did
what to the AIS. This may provide some focal
direction to the audit plan, audit tests and audit
judgement. In other words, this will provide a richer
picture of the auditee’s socio-technical interfaces and
would contribute to the auditor’s interpretation of the
auditee’s socio-technical inscriptions.

Interpreting Socio-Technical Inscriptions

Since the invention of the wheel, it has been used in
peace and in war, and were in a position to control its
use for their own purposes. Computer technology is
quite similar to that of wheel technology but it poses
its own threat; where humans become one with this
technology. They become one with it because of their
use that affects it, as well as getting affected by it
through: INFORMATION.

Information

In our human advancement in reaching for modernity
(or it might be said, reinventing ourselves),
computers were invented. They were built to describe
and interpret information about our own human
world using a human way of communicating our
perception of it; through language or our systems of
signs.

In our practical area of interest (computer
auditing) we are particularly concerned with
information problems. We tend to tackle them from
many different perspectives depending on the context
of information and our interdisciplinary expertise
e.g., systems engineering, computer science,
accounting, auditing, operational research,
management science.

A proper understanding of information can help us
examine complex questions about information eg.,
their existence; their quantitative measures; their
qualitative qualities; their valuation issues.
Information is problematic because it can be defined
in so many ways that may contradict one another and
therefore we are left to choose either the best
definition or the best combination of definitions for
our purposes.

For our purposes, it is important to identify at least
the following elements: information represents
something or someone of our physical world; it
cannot exist independently of the perceiving person
who gives it meaning and somehow acts upon it, and
the differences between data and information must
be preserved, at least in so far as information is data
organised by someone in a meaningful way for some
perceived purpose.

When systems engineers face an information
problem they may first look at the signalling or coding
of messages. When computer scientists encounter the
same problem, they may look first at the logic of the
data structures. As for accounting specialists, they
will be concerned with the social interactions and how
to interpret accounting guidelines and procedures.
Audit managers may take a broader look at the
information problem and may be concerned with the
business culture of the auditee’s organisation.

All of these four views are relevant to different
elements of communication in organisations. Our
challenge as computer auditors is to hold together
these apparently disparate approaches in such a way
as to be able to use information to control, to
construct, to improve, to manage the audit and above
all understand and make sense of our role and
realities.

One particular established area of study that can
provide us with a firm foundation on which to build is
Semiotics. Semiotics or the theory of signs is
particularly useful for it provides a common
framework to the human interpretation of both social
and technical signs.

A Semiotic Approach to Computer Auditing

In any problem structuring method or problem
solving approach, it is fundamentally important to
recognize how the problem is being viewed. This is
integral to information and computer audit, especially if these different views would affect how
information is to be treated throughout the computer
audit.

Stamper (1992) argues that the classical
Methodologies (Systems Development
Methodologies) all share the perspective that the
world is an objective reality and information
represents it, whilst messages flow, like a mystical
fluid, carrying information around the systems we
build.

If we adopt this view to computer audit, we can
identify how our structured methodologies tend to
concern ourselves with the processing of the messages
leaving all concern for meaning and the purposes of
the messages to the users because we feel they are
issues outside our province.

What is Communication?

All communication (Jakobson, 1962; Saussure, 1960;
Piaget, 1968) consists of a message initiated by an
addressee, whose destination is an addressee. But the
process is not as simple as that. The message requires
contact between addresser and addressee, which may
be oral, visual, electronic or whatever. Jakobson,
(1962) argues that it must be formulated in terms of a
code: speech, numbers, writing, sound-formations,
etc. And the message must refer to a context
understood by both addresser and addressee, which
enables the message to ‘make sense’ - as the context
of the present discussion enables individual phrases
and sentences to be meaningful where otherwise
(uttered at, say, a football match) they would not.
In a socio-technical interface situation, a communication involves at least two parties: a human and a CBIS. This process can be characterised as a set of activities involving a sender with intentions to convey, a medium or channel for carrying signals, and a receiver who has the ability to interpret those signals.

In considering the act of communication of signals through the socio-technical interface, the computer has no bearing on the intentions, the meaning, or the interpretation of those signals. Hence, communication of signals can be thought of as a social phenomenon where intentions are being communicated and interpreted by humans.

The socio-technical interface can be thought of as a medium for the communication of signs between the social and technical components. Both sign systems originate from the same source: humans. They have been created by humans and being interpreted by humans too. Hence, semiotics plays an integral role in bringing together both sign systems. This is important so as to be able to have some common method to the creation and interpretation of signs infiltrating through the socio-technical interface.

Signs

The classical definition (Stamper, 1992) of a sign - aliquid stat pro aliquo - was modified and expanded by C.S. Pierce into

A sign is something which stands to somebody for something in some respect or capacity.

Pierce’s definition emphasises that a sign has at least three aspects:

(a) some physical representation;
(b) something to which this refers or alludes;
(c) somebody able to interpret this relationship.

Communication takes place by the use of signs which have a number of properties. These properties of signs can be thought of in terms of Stamper’s (1992) expansion on Pierce’s definition to include the following: physical signs, empires, syntactics, semantics, pragmatics and the social level. These levels represent a range from the most social to the most technical aspects of communication within which we can employ different analytical tools.

The levels can be seen in two parts: Pragmatics and Semantics correspond to the content and purpose of communication. Syntactics and Empirics correspond to the form and means. This would leave us with the Physical Sign itself which we need to account for, and the Social level is best understood as a process of imparting form to a social situation. The entire structure presupposes that responsible agents, which

FIGURE 5 - SOCIO-TECHNICAL SEMIOTIC LEVELS

might be individuals, groups, or larger organisations, have commitments, expectations and relations within social frameworks.

Pragmatics

Pragmatics takes into account the general culture and broad context of communication where we take account of the assumptions, expectations and beliefs of the agents involved, and assess them in relation to the social environment in which signs are being used.

Semantics

Semantics is concerned with meaning and knowledge where we take account of the connections that agents make between the signs that they use and their behaviour and actions.

Syntactics

Syntactics is concerned with the logic and grammar of communication where it provides us with tools for the construction of formal rules and the means by which they interrelate.

Empirics

Empirics describe the codes, signals and physical characteristics of the medium of communication where we employ the statistical description of the speed and quantity of signals and the mechanisms for encoding and decoding them.

Most socio-technical interfaces are difficult to understand when first looked at and require an analytical approach. The approach described above derived from the characteristics of signs, allows the auditor to see how socio-technical interfaces operate as sign processing systems where people do the
processing. It allows us to identify problems which would not otherwise have come to our attention. Then we can examine the different properties of signs employed in the interface, and the understanding which comes from that examination contributes to our ability to form better judgements. The process of analyzing signs and how they function is called semiotics.

Semiotics can be used to examine the socio-technical interface through identifying which parts of the interface would correspond to the different semiotic levels. As outlined earlier on, semiotics can be classified into two parts: (a) Pragmatics and semantics, and (b) Syntactics and Empirics. The first part (a) corresponds to the content and purpose of the communication, hence fostering the social aspect of the communication. The second part (b) corresponds to the form and means of the communication, hence, fostering the technical aspects of the communication.

The socio-technical interface was considered earlier on, to outline the communication process between humans and computers. I think that, now I can argue that, if semiotics as an approach is concerned with the communication process then it can be adopted to understand the socio-technical interface as a medium for communication. This is especially the case with the inability of classical structured methodologies to capture meaning and purposes of the messages within the system.

By doing so, there is a case that provides the basis for constructing a Semiological Computer Audit Approach. The reason is that the concept of a sign is not a vague one but, one that can be operationalised either by experiment, to ascertain the existence of regularity of behaviour, perception, judgement, etc. or by expressing the sign in a written form and asking for judgements about the validity of the formulation.

Conclusions

This aim of this paper has been to outline an alternative outlook that considers both the social and technical elements of computer based information systems. I have used the user systems interface which is a familiar concept to computer audit professionals. It is a concept that has often been dealt with in the information systems literature. I have intentionally used it, because I believe that any human activity is a mere information based system and it is our responsibility to address both social and technical implications rather than being only fascinated with the technical components of computer based information systems.

This outlook offers a way of perceiving what exists using the socio-technical interface view of a computer based information system. This view is particularly useful for it focuses on the communication process which is central to our human way of existing in this world. I have outlined how both humans and computers communicate using signs. The socio-technical interface can be thought of as a medium for the communication of signs between the social and technical components. Both sign systems originate from the same source: humans.

Communication takes place by the use of signs which have a number of properties. These properties of signs may include the following: physical signs, empires, syntactics, semantics, pragmatics and the social level. The levels can be seen in two parts: Pragmatics and Semantics, which correspond to the content and purpose of communication; and Syntactics and Empirics which correspond to the form and means. This would leave us with the Physical Sign itself which we need to account for, and the Social level is best understood as a process of imparting form to a social situation. The entire structure presupposes that responsible agents, which might be individuals, groups, or larger organisations, have commitments, expectations and relations within social frameworks. The process of analyzing signs and how they function is called Semiotics.

In conclusion, I would like to propose a different outlook to develop an alternative methodology to the traditional and classical methods, the aim of which is two fold:

(a) to enable auditors to capture meaning and purpose rather than form and means of what exists, so as to make better sense of our role and reality

(b) to call for a debate in defining and identifying what constitutes our interdisciplinary area of practical knowledge, that is Computer Audit.

References


BRITISH COMPUTER SOCIETY
COMPUTER AUDIT SPECIALIST GROUP

Minutes of the Annual General Meeting
held at the International London Press Centre on 12 May 1993

Held in the presence of 14 members of the Group including the Chairman, the Secretary and the Treasurer.

1. Approval of the minutes of the 1992 AGM

The minutes of the 1992 AGM held on 13 May 1992 as circulated at the meeting were approved as a correct record of the meeting.

2. Chairman's Report

Dr John Mitchell presented this report for 1992/93 and highlighted the following:

* CASG is on a firm financial footing despite running a deficit on recurring activities. He thanked the CASG committee for their hard work during the year.

* After three years of maintaining the level of our subscriptions it is now necessary to increase these for 1993/94.

* The membership of our group has doubled in the last four years to almost 400; it is disappointing however that the numbers dropped a little this year, especially in the corporate category. John still has a personal goal of 500 members.

* There was a full programme of meetings including two joint meetings with IIA and one with EDPAA; the two discussion groups run during the year were successful and well supported. On average the attendance at our meetings was up on last year.

* We are now receiving royalties on our book Control and Audit of Databases and also receiving a steady income from Malcolm Lindsey's booklet Auditing the AS400.

* The 1993 annual conference was well organised although we anticipate making a loss for the first time.

* The joint meeting with the IIA Home Counties was successful as usual but not the one with IIA Midlands where very few people turned up.

* We enjoy good relations with EDPAA and work closely to avoid duplication of topics.

Our first joint meeting, a debate, was very enjoyable and so we have agreed to repeat it next year on a different subject.

3. Treasurers Report

Fred Thomas circulated a copy of the unaudited accounts for the year to 30 April 1993. Fred said that although these accounts show an overall surplus of £2,151 there is a deficit on recurring activities of £891. Bearing in mind that the discussion days run at a surplus, albeit a small one, the overall surplus is mainly due to the conference surplus of £1,545 and a one off special refund of income tax on interest of £1,257. This supports the need for a review of the subscription rates to safeguard our recurring activities by continuing to fund it out of the subscription income.

The accounts were duly approved at the meeting subject to the audit.

4. Election of Officers and the Management Committee

As there were no nominations for any of the officers' positions it was agreed that Dr John Mitchell would continue as Chairman of the Group, Raghu Iyer as the Secretary and Fred Thomas the Treasurer. The meeting also accepted the appointment of Tony Locke as the Hon. Auditor. On behalf of the Specialist Group, Fred Thomas thanked Tony Locke for undertaking this role.

The Chairman reported that Ian Longbon and Chris Birt were retiring from the Committee but the remaining members had all indicated their willingness to continue. John Mitchell asked members present to come forward to join the Committee and in response Nigel Smith volunteered. It was agreed that he will be allocated the responsibility of looking after the publications of the Specialist Group.

The meeting approved the election of the officers, the Hon. Auditor and the committee members as noted above. John Mitchell thanked Ian Longbon and Chris Birt for their excellent service to the Specialist Group over the past several years.
The Committee elected for 1993/94 was therefore as follows:

**Officers**
Chairman
John Mitchell Little Heath Services
Secretary
Raghu Iyer KPMG Peat Marwick
Treasurer
Fred Thomas Retired Consultant

**Members**
Journal Editor
Rob Melville City University
Members’ Meetings
John Bevan Consultant
Alison Webb Consultant
Discussion Groups
Bill Barton The Rank Organisation PLC
Steve Pooley Consultant
Annual Conference
Paul Howitt Tesco Stores Limited
Membership Secretary
Jacqui Race The London Stock Exchange
Press & PR
Jarlath Bracken Zurich Insurance Company
Publications
Nigel Smith Consultant

5. Approval of new subscription rates

Referring to the 1992/93 operating loss on recurring activities John Mitchell said that he did not feel that it was appropriate to rely on non-recurring income to fund our recurring activities. In addition, the annual conference, which has always made a surplus in the past, is expected to make a loss of some £800 - £1000 this year. He therefore proposed that the membership subscription be increased as follows:

- Corporate Membership from £50 to £75
- Individual Membership from £15 to £25
- Non BCS Members from £10 to £15
- BCS Members from £10 to £25

A new student membership rate of £10 was proposed, and this should be for full time students provided they can forward a written affidavit from their tutors. It was noted that there has been no increase in subscription rates for the last three years and the proposed increases are therefore necessary.

The above proposal was put to the meeting. From the floor one member commented that the increase was somewhat high in percentage terms and felt that it might put off existing members who may not wish to pay more. After some discussion the proposal was put to the vote. The meeting voted 13 in favour and 1 against and according the increase in subscription charges were approved.

6. The proposed 1993/94 members’ meeting programme

John Mitchell briefly covered the plans for next year which will be published in detail in the summer issue of the Journal. From the floor one of the members present offered an IBM speaker for the document image processing joint meeting with the IIA, if needed. This was noted.

John urged members to provide articles for the Journal which is now professionally designed and provides valuable information to the members.

7. Liaison with BCS

John Mitchell said that the new proposed companion membership of the BCS is of interest to the Specialist Group Members.

He also commented on the relative importance placed by BCS on quality audit qualifications as compared to those for the computer audit and the fact that the former was always placed one level higher in the BCS ISM. He felt that computer audit should be placed higher in the mainstream information technology.

There being no other business the 1993 AGM of the British Computer Society CASG was closed.

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**Masters Degree in Internal Auditing**

South Bank University have launched its new part-time degree in Internal Auditing which will commence in the autumn of this year. The degree has Information Technology and Quality Assurance electives and is likely to be of interest to practising I.T. Auditors. For further details contact Marion Bateman at the University on 071 815 7868.
# Management Committee

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>CHAIRMAN</td>
<td>John Mitchell</td>
<td>Little Heath Services</td>
<td>0707 654040</td>
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<tr>
<td>SECRETARY</td>
<td>Raghu Iyer</td>
<td>KPMG Peat Marwick McLintock</td>
<td>071 236 8000</td>
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<tr>
<td>TREASURER</td>
<td>Fred Thomas</td>
<td>Retired Consultant</td>
<td>0371 875457</td>
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<tr>
<td>MEMBERSHIP SECRETARY</td>
<td>Jacqui Race</td>
<td>The Stock Exchange</td>
<td>071 797 3551</td>
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<tr>
<td>PUBLICATIONS</td>
<td>Nigel Smith</td>
<td>NJ Associates</td>
<td>0707 334421</td>
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<tr>
<td>MONTHLY MEETINGS</td>
<td>John Bevan</td>
<td>Audit and Computer Security Services</td>
<td>0922 582439</td>
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<tr>
<td></td>
<td>Alison Webb</td>
<td>Independent Consultant</td>
<td>0223 461316</td>
</tr>
<tr>
<td>CONFERENCE ORGANISERS</td>
<td>Paul Howitt</td>
<td>Tesco Stores Ltd</td>
<td>0992 632222 Ext 54320</td>
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<tr>
<td>DISCUSSION GROUPS</td>
<td>Bill Barton</td>
<td>The Rank Organisation plc</td>
<td>071 872 6720</td>
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<td>Steve Pooley</td>
<td>Independent Consultant</td>
<td>0580 891036</td>
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<td>MARKETING &amp; PR</td>
<td>Jarlath Bracken</td>
<td>Zurich Insurance</td>
<td>0705 822200</td>
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<tr>
<td>JOURNAL EDITOR</td>
<td>Rob Melville</td>
<td>City University Business School</td>
<td>071 477 8646 <a href="mailto:SC355@CITY.AC.UK">SC355@CITY.AC.UK</a></td>
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Membership Application/Renewal
(Renewals are due in August of each year)

I wish to APPLY FOR / RENEW (delete as appropriate) my membership of the Group in the following category and enclose the appropriate subscription.

CORPORATE MEMBERSHIP (Up to 5 delegates)*
* Corporate members may nominate up to 4 additional recipients for direct mailing of the Journal and attendance at our meetings (see over)

£75

INDIVIDUAL MEMBERSHIP (NOT a member of the BCS)

£25

INDIVIDUAL MEMBERSHIP (A member of the BCS)

£15

BCS membership number: ____________________________

STUDENT MEMBERSHIP (Full-time only and must be supported by a letter from the educational establishment). Educational Establishment: __________________________________________________________________________

£10

Please circle the appropriate subscription amount and complete the details below.

INDIVIDUAL NAME:
(Title/Initials/Surname)

POSITION:

ORGANISATION:

ADDRESS:

POST CODE:

TELEPHONE:
(STD Code/Number/Extension)

PROFESSIONAL CATEGORY: (Please circle)
1 = Internal Audit
2 = External Audit
3 = Data Processor
4 = Academic
5 = Full-Time Student
6 = Other (please specify)

SIGNATURE: ___________ DATE: ___________
## ADDITIONAL CORPORATE MEMBERS

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Venue for Members’ Meetings

Royal Institute of Public Health & Hygiene
28 Portland Place
London W1

SUBMISSION DEADLINES

Spring Edition 14th February
Summer Edition 14th May
Autumn Edition 14th August
Winter Edition 14th November