

Interfaces

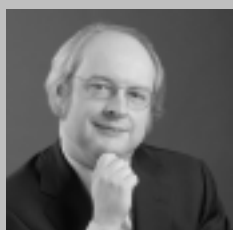
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British
HCI
Group

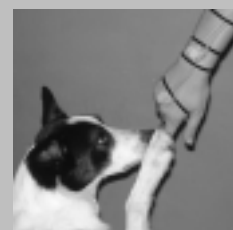
www.bcs-hci.org.uk



Is Jakob usable?
Is accessibility usability?
Can computers be pets?
Can Alan Dix argue that
black is white?



Answers to these and more inside...





View from the Education and Practice Chair



Kia Ora – I'm William Wong and I'm the new chair of the Education and Practice Sub-group. I take over the reins from Barbara McManus and Janet Finlay. Laura asked if I could write a short column about myself and my view of the Sub-group. I arrived in the UK just over a year ago to take up the position of Professor of Human-Computer Interaction and Head of

the Interaction Design Centre (IDC) at Middlesex University in London. The IDC is home to a number of HCI research groups in complex and collaborative systems, socio-ethical issues in ICT, internationalisation, digital library, information access, and design for all.

About me

Born in Singapore, I spent 13 years with the Singapore Armed Forces in various roles including an infantry platoon commander, a Weapons Systems Officer controlling air defence fighter and missile interceptions, a staff officer for command and control, and eventually left the service in 1992 as Head, Systems and Communications Operations Branch, Headquarters Republic of Singapore Air Force.

I then joined, as Assistant Lecturer, the faculty at the Department of Information Science, University of Otago, in Dunedin, New Zealand. In my 11 years at Otago, I couldn't help but fall in love with the expansive blue and gold countryside, enjoy a can of Speights, learn about the Kiwi can-do attitude, find out that an incredible amount of things can be fixed with No. 8 fencing wire (... rather than heaps of money), and find out how the lack of overweight bureaucracies can make things happen. Those days were quite exciting. I set up and directed the Multimedia Systems Research Laboratory, and I developed and taught seven courses in HCI, Human Factors in Information Systems, Multimedia Systems, and Cognitive Engineering, at both undergraduate and postgraduate levels. While I got a PhD in the process, Otago also made me an Associate Professor. Through my sins as a National Councillor and a Regional Chair in the New Zealand Computer Society, they made me a Fellow of the Society.

About the Education and Practice Sub-group

What is the Education and Practice Sub-group? We are a group of people responsible for a number of issues: Catriona Campbell is leading our efforts with accreditation of HCI professionals; Jonathan Earthy and Nigel Bevan are leading the BHCIG's efforts in the review of the systems ergonomics specification in the SFIA (Skills Framework for the Information Age) and standards; Tom McEwan and Paul Ledge ran the last HCI Educators workshop in Leeds. Other issues to be addressed include consultancy, linkages between academic HCI and industry HCI, mentoring, and best practice in HCI education and training.

Where we are headed? In discussions with Jonathan Earthy, one of the "big" items on our horizon is the SFIA

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review. We need to match the systems ergonomics "curriculum" specification in SFIA with a "new" and larger scoped "HCI" perspective that is more representative of what HCI is and does in the real world – so that when the SFIA is used to hire HCI specialists, it is a useful and accurate tool for advising managers. This will have a significant impact on our accreditation scheme and what it is that we accredit as HCI professionals. So, while the SFIA review and the HCI professionals accreditation scheme are different, they are closely related. I find that this has quite amazing implications –



many countries around the world follow our lead and then either adopt our scheme or base their own schemes on what we do. The timeframe for this is the next six months – we are looking for volunteers to help us define the systems ergonomics specification in SFIA. What an opportunity to make decisions that influence the world!

What else is on the horizon? Packaging of the HCI body of knowledge into blocks to dovetail into our continuing education modules, and advance training modules. Jonathan calls this "... a personal development framework for HCI people after formal education" and "... guidance for non-HCI people in ICT on human-system issues." Can we use the SFIA to drive the BHCIG's Continuing Professional Development (CPD) approach? For example, can it be part of the BCS CPD or upgrading scheme? Should we have one CPD stream for practitioners and one for educators? The BCS also recently introduced a new TLA (three letter acronym), CSci, short for Chartered Scientist (think Chartered Engineers and Chartered Accountants). Should our accreditation scheme tie in with the CSci arrangement? and if so, how?

More questions and lots of exciting developments ahead. For now, the immediate concern is organising the forthcoming HCI Educators Workshop, 18–19 April 2005, in London. Our focus this time is (i) best practice in HCI education and training in university and industry, and (ii) understanding the systems ergonomics component of the SFIA and how that might inform our education and training practices, and, in turn, how we might influence the re-development of the SFIA, which will impact the criteria for HCI accreditation.

I'd like to invite you to join us as we set in place the framework for the future of HCI in the UK. Join us and let's make a difference.

William Wong
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Editorial

Laura Cowen

Back at work after the Christmas break, I've already come across an example of slanty design (as described by Russell Beale on page 5). The entrance/exit of my building at work has a new, automatic, super-accessible, wide door. To get out of the building, you have to press a large button on the wall, which triggers the door to open inwards. I say it's slanty design because you're prevented from being in the way of the opening door by the button being located about two metres away from the door handle. Good eh? Until you forget about the button, arrive at the door, and have to backtrack to reach the button, colliding into other eager leavers behind you. Maybe not so slanty after all. Maybe just not very usable – as evidenced by the number of pieces of scrawled-on masking tape on and around the button to instruct users on how to interact with the button (which is actually not that bewildering).

Robert St Amant's students (page 13) would probably have something to say about it, or maybe all that's to be said is that HCI professionals will always find something to moan about about (see Tom McEwan on his new GPS toy; page 20). But maybe that's just Jakob's influence on us: to see and point out the bad, rather than the good (see Frank Spillers' analysis on page 17).

Happy new year!

Laura Cowen
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RIGHT TO REPLY

Make *Interfaces* interactive! We invite you to have your say in response to issues raised in *Interfaces* or to comment on any aspect of HCI that interests you. Submissions should be short and concise (500 words or less) and, where appropriate, should clearly indicate the article being responded to. Please send all contributions to the Editor.

To receive your own copy of *Interfaces*, join the British HCI Group by filling in the form on page 27 and sending it to the address given.

NEXT ISSUE

Interfaces welcomes submissions on any HCI-related topic, including articles, opinion pieces, book reviews and conference reports. The next deadline is **15 April**, but don't wait till then – we look forward to hearing from you.

with thanks to commissioning editors:
Book Reviews: Sandra Cairncross, s.cairncross@napier.ac.uk
Profile: Alan Dix
Photo credits: pages 8, 9 Matt Horton; 11, 12 Tom McEwan; 16 Vassilis Kostakis; 17 courtesy of Jakob Nielsen, www.useit.com/jakob/photos/; 19 Gabriella Kazai;

Deadline for issue 63 is **15 April 2005**. Deadline for issue 64 is **15 July 2005**. Electronic versions are preferred: RTF, plain text or MS Word, via electronic mail or FTP (mail fiona@hiraeth.com for FTP address) or on Mac, PC disks; but copy will be accepted on paper or fax.

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and copy email submissions to Fiona Dix, *Interfaces* production editor; email: fiona@hiraeth.com

PDFs of *Interfaces* issues 35–60 can be found on the B-HCI-G web site, www.bcs-hci.org.uk/interfaces.html



Deflections

Accessibility *isn't* Usability

Gilbert Cockton

In *Interfaces* 59, I wrote that Accessibility *is* Usability. I noted that the wide range of functional impairments makes accessibility different from usability. Further factors suggest that accessibility *isn't* usability, but it *should be*. It *will be* when we have the data on device demands and individual capabilities that let us understand how specific designs enable specific groups of individuals despite their functional impairments. Oh, and some other things must change too.

Accessibility isn't usability because public policy prescribes accessibility in a way that it never has for usability. Although the EU Directive 90/270 on VDU-Work stated that the "principles of software ergonomics must be applied to human data processing", this never kicked off a hoard of "get accessible or get sued" consultants like those who jumped on the accessibility bandwagon. Whatever the differences in legislation, poor accessibility is seen as a bigger sin than poor usability.

The influence of advocacy groups who represent impaired individuals also makes accessibility different. Their impressive PR performance must be one reason why accessibility is more of a public policy issue than usability. However, advocacy groups don't (yet) have all the answers, and within the HCI community they can be seen as a problem, with national versions of one group in particular seen as dominating and distorting policy in many countries. Advocacy groups also promote guidelines decades after the HCI community realised that they are a double-edged sword, where the good edge may be much the smaller. So, web pages clog up with empty ALT tags in sacrifice to the great god Bobby and others, and not always to fake a good rating. In some contexts, accessibility does not require an ALT tag, but to pass some mechanical check, in they must go, confusing the visually impaired as a result.

Assistive technologies create further differences. These are some form of add-on to everyday systems to make them accessible to excluded users. Usability is *not* achieved via a wide range of uncontrollable and often substandard add-ons. Nor is there a usability equivalent of Universal Design, as there are no assistive technologies to do without, or to replace with an 'exclude nobody' design. Worse still, usability is not judged by how well a system works with add-ons that are almost a decade behind in their capabilities. JavaScript was introduced in 1995, yet web sites world-wide have their JavaScript reduced, removed or bypassed to work with near mythical screen readers that "don't do JavaScript". Of course, with JavaScript idioms such as mouseovers, screen readers would be very challenged to "do JavaScript", but many JavaScript idioms are tractable for screen readers, if only someone somehow could invest some serious effort. It seems a ridiculous waste of developer effort to fix millions of web pages rather than fixing scores of available screen readers.

This introduces another difference between usability and accessibility, market failure, which obstructs the advance of usability because too many buyers (and not just system commissioners) do not want to pay for it. However, market failure in accessibility is not due to a lack of demand, but to the quality of supply (OK, usability has some pretty big

supply problems too). Screen readers are a case in point. Developers jump through hoops to create content that will work on the world's most incapable screen reader (if we all knew what this was, we would have a precise lowest common denominator). With the combined resources of governments and relevant charities, the visually impaired could be given the screen readers that they need rather than what they can currently get. Health sectors worldwide regularly provide free prosthetics to various groups. Why can't screen readers be the same? Why not fund several screen reader developers to let impaired users access as much as the able-bodied? Surely the aim of accessibility is to give impaired people access to the best, rather than give unimpaired people access to second best?

Where usability and accessibility *are* the same, however, is in public education. The public have expectations of the digital world that they would never apply to the physical world. To see how, visit a brand new accessible building and count the accessibility features: wheelchair ramps, railings and handles, disabled toilets, talking lifts, visible fire alarms, Braille signs, wheelchair lifts, induction loops. Have I missed anything? Is anything missing from this list that is demanded fiercely by advocacy groups. Now do the same for a web site. What is actually there for impaired users on a best of breed accessible web site? What is missing that is demanded fiercely by advocacy groups? See any difference? Now add expectations about usability, and you can see that while the public understand buildings and the physical environment well, and can see the possibilities for achievable (even at high cost) accessibility, this is less so for the usability and accessibility of digital environments. Many problems faced with digital products and services are due to widespread public ignorance. A sound public understanding of how usability and accessibility are really achieved would do more for interaction quality than the current raft of threatening checklists, which we know don't work: time to start educating our masters.

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Accessible Design in the Digital World

23–25 August 2005

Dundee, Scotland

Doctoral Consortium, 23 August

Student participants will have their abstracts published in the conference proceedings and a poster of their work will be exhibited during the conference.

Doctoral consortium submissions deadline is
12 April 2005

For more information, see
<http://www.accessinthedigitalworld.org/2005/callforparticipation/consortium.asp>



Usability – a new slant

Russell Beale

Usability is not always king – as Doug Engelbart once said: “If ease of use was the only valid criterion, people would stick to tricycles and never try bicycles”.

We need more than usability to make things work appropriately. Design is (or should be) a conversation between the users, the desired outcomes and side-effects, and the experts, and we have to ensure that the needs of one are not subsumed by the demands of another.

In the bad old days, the systems programmers built the system based on what they thought the users wanted, and it didn't work too well. In these more enlightened times, we have user-centred design which gives far greater weight to user experience and desirability. Bring on slanty design.

Slanty design is the term given to design that purposefully reduces functionality, and it is often very effective. For example, in the U.S. Library of Congress some desks are angled, with glass over the wood, so that nothing harmful can be placed on the desks. This makes them less usable (a user-centric angle) but much more appropriate for their overall purpose.

The new Apple iPod Shuffle is also an example of slanty design. Small, neat and light, it holds about 100 songs, piggybacks on the wave of iPod chic, and is marketed with a lack of usability as a selling point. You can either play all the tracks in order, or play them randomly. Oh, and you can skip to the next track. Where is Apple's famous usability? It went when they decided to remove the screen, which I suspect had far more to do with manufacturing costs than with a desire to create a new musical experience for their customers. So, it's less usable. But is it less desirable? Probably not. It brings iPod cool down in price, making it even more widely available. It does offer a different experience in listening to music – how many people do you know who actually ever use the random button on their CD players? The fact that people could have experienced music in this way doesn't mean that they actually did. And Apple are banking on the fact that just because they didn't use it doesn't mean they wouldn't want to. Still with me?

For me, one way of viewing slanty design is that it can do away with signs and instructions. Slanty design incorporates the message, making it hard to do unwanted things as well as easy to do wanted things. If usability is making it easy for users to do what they need to do, then we need to have unusability as well – making it hard for them to do the things we don't want them to do. Rather than a notice “Do not sit here”, a slanty design would make it difficult to sit, forcing people to go somewhere else.

A pharmacological analogy springs to mind: a powerful drug may well do exactly what we want it to do (stop rejection of a transplanted organ, for example). However, it may be a 'dirty' drug, in that it has numerous unwanted side-effects. One approach is to treat the side-effects with other drugs, but this is a somewhat circular argument and anyone who has had serious medical treatment knows it makes you rattle like crazy because of all the pills you have to take. A better approach is to develop cleaner drugs – ones that have the same effect on the problem, but fewer side-effects.

Perhaps this is a new concept we need to add into our usability vocabulary – we want *lean usability*: usability on the important issues, but without the side-effects that allow the users to create a whole new set of problems for themselves.

I'd incorporate slanty design at airport baggage carousels. The scrum of trolleys around the carousel makes it practically impossible to grab your bag when it finally emerges, and a number of approaches have been tried. Big signs were the first: “Please leave a gap between the carousel and your trolley”, which didn't work. Next, a boundary line was drawn around the belt – this had a slight effect, but hardly solved the problem. The best solution I've seen so far is a wide strip of strongly coloured tiles around the belt; psychologically, people are reticent about breaking into that boundary area and it reduces the scrum slightly. But it only takes half a dozen people to push into the space, and the effect begins to break down, exacerbated by the fact that it becomes harder to see the floor once there is a mass of people near it.

My slanty design would put a ramp of about 45 degrees extending two metres or so from the belt. It would be uncomfortable to stand on, and trolleys would roll off backwards, or at least be awkward to handle. I might add a small dip that caught the front wheels, too, making it even harder to get the thing on there in the first place, but not big enough to trip anyone up. If I was being really slanty, I'd make the surface from one-inch high stiff bristles, making it a real pain for the trolleys and not too comfy for the passengers. Much easier for people to remain, with their trolleys, on the nice flat floor than negotiate my awkward hill – and therefore we'd retain the space we need, and people could manage the short dash forwards, up the hill, to grab their bag and then return to their trolley, clearing the way for the next passenger.

Clean and slanty – the future of usability?

Russell Beale

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CREATING BONDS WITH HUMANOIDS

In conjunction with AAMAS 2005

Utrecht University, The Netherlands

July 25/26, 2005

Humanoids (virtual such as Embodied Conversational Agents, ECAs in short, or human-like robots) are a powerful means of interaction between humans and machines.

The topic of this workshop is on the bonds that humans and humanoids (virtual or not) may create with each other when interacting. More specifically, it lies in techniques and models allowing an agent to build a long lasting relation with the user.

The deadline for submitting contributions to the workshop is
March 14, 2005

For more information, see

<http://www.iut.univ-paris8.fr/~pelachaud/AAMAS05>



HCI and the Older Population workshop

Joy Goodman



The proportion of older people in the developed world is rapidly increasing and it is imperative to consider how technology design can meet the needs and wants of this important user group.

Older people currently control a large proportion of

the wealth in the UK and many have a substantial disposable income. There is also no evidence that they are particularly averse to using new technologies, if those technologies are appropriately designed and introduced. In addition, the increasing proportion of older people will lead to a significant increase in the numbers needing support for daily activities and in those needing long-term care. Technology presents one important avenue for providing such support but only if it meets actual needs in appropriate ways and can be used effectively.

These reasons provide strong imperatives for investigating human-computer interaction as it relates to the older population, and provided the motivation for the workshop on 'HCI and the Older Population' at HCI 2004. This attracted 24 participants, from as far afield as the US, Japan and Finland and from a mix of different backgrounds – universities, research institutes, industry, and the older population.

The workshop followed a varied programme, with talks on topics as diverse as game design, navigation, support for social interaction, information access, and the use of theatre to demonstrate product ideas. Others had the opportunity to present their work through posters and the occasional demo.



Posters also helped to present several key issues in the area and provided the opportunity for participants to respond to them individually before breaking up into smaller discussion groups (and taking advantage of the September sunshine). These groups looked at three topics in more detail: ethical issues, research methods, and the characteristics of suitable technology. Interesting (and occasionally heated) discussions gave rise to some solutions and suggestions for the way forward.

Invited talks and videos helped the participants to gain a better rounded view of the area. Andrew Monk, from the Centre for Usable Home Technology at York University, raised the issues of dependability, sociability, and enjoyment in the use and design of technology. Isobel Lindsay and Wilfred Lakie, both members of the older population, helped us to understand the user's point of view as they described their experiences of technology and what they want from computers. Further insight into the user experience was provided by a series of videos, produced by the Utopia project. These videos used professional actors to portray, through scripted interactions, an amalgamation of many older people's experiences with computers.

The day seemed to be a great success, with attendees commenting on how enjoyable and interesting they had found it. It was felt that future similar workshops would help to consolidate this research community and we also hope to produce a journal special issue resulting from the workshop.

If you would like to find out more, read the proceedings or see some of the outcomes of discussions, please visit the workshop's website at

<http://www.dcs.gla.ac.uk/utopia/workshop/hciworkshop04.html>

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How secure are memorable passwords?

Alistair Edwards

It seems that we need increasing numbers of passwords in order to do almost anything on the Web. We are frequently urged to choose 'good' passwords – ones which will not be easy for someone else to guess or for 'cracking' software to break. The strongest password is a random selection of characters – but that is also likely to be very hard to remember.

I am carrying out an experiment to try to measure the strength and the memorability of different passwords. I need to collect a lot of data and am therefore asking for volunteers to visit <http://www-users.cs.york.ac.uk/~alistair/passwords/> to take part in the experiment. The task is not very daunting. It requires a total of three visits to this website: one to set the password and two more to see whether you have remembered it (email reminders are sent).



Applying e-science to social science

Gillian Sinclair

The ESRC National Centre for e-Social Science (NCeSS) was formally launched in December 2004 by Professor Ian Diamond, Chief Executive of the ESRC, and Sue Duncan, Government Chief Social Researcher. Its mission is to encourage the UK social science research community to explore the application of Grid computing and 'e-Science' to social science research problems. Since coming into existence in April 2004, the centre has recruited a team of seven staff based at the hub at the University of Manchester with support from the UK Data Archive at the University of Essex.

The application of e-science in the social sciences is a new concept and will involve many challenges. At first it may be difficult to comprehend how e-science could be applied to the research challenges faced by social scientists. However, several areas have already been identified, such as making social science datasets more accessible, easier to integrate and share; enabling the collection of new kinds of data and in much larger volumes; providing more powerful modelling and simulation-based tools; facilitating national and international collaboration.

To develop the research agenda for e-social science, the ESRC initially funded eleven small pilot demonstrator projects. Each of these took an aspect of social science research and investigated the possible developments or improvements that e-science could bring to it. A wide range of issues were examined such as confidentiality and ethical issues posed by the Grid; the combining of quantitative and qualitative data in real-time for analysing financial markets; the effectiveness of an Open Grid Services Architecture component-based approach to handling large-scale statistical modelling problems; and the development of a software demonstrator to show the potential of Grid technologies to support and extend existing practices in video analysis. Further information regarding these projects can be found on our website.

In December 2004, four NCeSS research nodes at various institutions across the UK were announced. These nodes have funding for three years and a remit to take an in-depth look at the application of e-science to specific areas of social science research:

Collaboration for Quantitative e-Social Science Statistics (Lancaster University): stimulating the uptake of quantitative e-social science methodologies and Grid technologies in the social sciences, government agencies, social and health services, industry and commerce.

Modelling and Simulation for e-Social Science (Leeds University): mobilising the Grid to develop tools whose power and flexibility surpasses existing research output, and demonstrating their applicability within a variety of substantive research and policy environments.

Understanding New Forms of Digital Record for e-Social Science (Nottingham University): exploring how new forms of digital record may emerge within e-social science, and examining how Grid-based technologies can be extended to provide new processes and services through which social science data may be collected, collated, and distributed.

Mixed Media Grid (Bristol University): generating tools and techniques for social scientists to collaboratively analyse audio-visual qualitative data and related materials. The node focuses on understanding current analytic practice, and applying this understanding to develop interfaces and infrastructures for collaborative research.

Further nodes will be commissioned in 2006.

In addition to node funding, small grants (up to £45k) are available for short-term projects. The small grant scheme has been designed to encourage innovative research ideas. Topics of relevance include the usability of Grid tools and infrastructures: as these become more widely deployed, usability is beginning to emerge as an important problem area. The HCI community, of course, knows very well that addressing usability issues is often critical for the successful introduction of new IT systems and work practices. In the case of e-social Science (and e-science more generally), these issues span an unusually wide range of concerns. They range from the challenge of representing the richness and power of Grid-based tools and services in a useful and usable form to diverse user communities, to the design of Virtual Research Environments for large scale, multidisciplinary research collaborations. The call for small grant applications is open until April 2005.

NCeSS has a remit to make the social science community aware of the research taking place in e-social science and the benefits of using e-science in research, and to encourage the community to get involved in shaping e-social science research. As part of the latter, NCeSS (in conjunction with the Joint Information Systems Committee) is organising a series of Agenda Setting Workshops. Three ASWs, covering topics such as video analysis, quantitative methods, and awareness and training, have already been announced. Full details, including booking information, can be found on the NCeSS website.

This summer will see the First International Conference on e-Social Science being held in Manchester (22nd–24th June) at which a range of papers, workshops and tutorials will be presented reporting on case studies of e-social science, applications, tools, methods and the impact of e-science on research.

The NCeSS web site (<http://www.ncess.ac.uk>) has details of current and planned activities, including the First International Conference on e-Social Science (CfP closing date: February 1st), and funding opportunities.

If you would like to be added to the NCeSS mailing list, or for information on NCeSS events, contact the Programme Manager, Gillian Sinclair (gillian.sinclair@ncess.ac.uk). For more information on the research programme, contact the Research Director, Rob Procter (rob.procter@ncess.ac.uk).

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The ABC of CCI (Child Computer Interaction)

Janet Read



Child Computer Interaction is a branch of HCI that is slowly becoming more prominent as researchers and developers start to take account of the ways in which children interact with computers. Over the last ten years, there has been activity in the design of interfaces for children in a number of different places, notably in Maryland, US by Allison Druin, and in Sussex by Yvonne Rogers and the late Michael Scaife; however, much of this was predominantly about design and some of the other facets of HCI have only recently begun to be well studied.

It might be argued that CCI as a discipline was first defined by the contributions made at the inaugural Interaction Design and Children workshop in 2002, which resulted from the joint vision of Panos Markopoulos and Mattilde Bekker at the Technical University of Eindhoven. This event has since been followed by annual peer-reviewed conferences, with proceedings published by the ACM Digital Library: the 2005 conference will take place next summer in the USA, and the 2006 conference is already planned for Finland.

The rise of activity in the CCI area has also led to other significant outputs; there was a special edition of *Interacting with Computers* in 2003, an MSc in Child Computer Interaction is being offered in Preston and a number of research groups have been set up around the country.

In this time of enthusiastic yet youthful growth, it is useful and possibly essential to stand back and attempt to answer the question – what is Child Computer Interaction? Or, more specifically, why and how is it different from Human-Computer Interaction; after all, aren't children also human? If CCI is defined by the contributions of a conference, what happens if the conference changes? For instance, it is currently the case that the CCI community is keen to keep educational technology at arm's length but this may not always be the case.

As a member of a Child Computer Interaction research group, I have been known to describe CCI as HCI with children; but this is not a very helpful definition as it fails to say anything about what is going on. Children are not little

adults, and with that, rather obvious, statement I present an ABC of differences (or an ABC of CCI).

A is for Activities

Children do different things than adults and they do different things than adults at computers. They are less likely to be doing work on the computer than adults and are more likely to be playing. They are seldom task-driven, which causes problems for many of the task-based HCI models and processes. It is non-trivial to do a task analysis of playing SIMS 2; it is equally difficult to do a cognitive walkthrough of painting a picture in Art Attack!

B is for Behaviours

Even when children are given the same applications and tools as adults they behave differently. Watching a child using Microsoft Word, or searching in Google, it is evident that they do not do the same things. When was the last time you used Word Art in a document? When did you last do a search on Google for Egipshuns?

The different behaviours of children are sometimes predicted by their incomplete models of what is going on in the interface, sometimes caused by their lack of knowledge (e.g. spelling), and sometimes simply a feature of their desire to use the more 'fun' aspects of software that adults feel are inappropriate!

C is for Concerns

When adults evaluate software they generally focus on usability, with some interest in learning and the user experience. The designers have a clear understanding about what the users want as they are from the same group. When children use software, as adults we need to be concerned about their safety (especially on the internet), but the children do not share this concern. Conversely, children want products that are fun and that support play and yet designers may be unable to envision this, thus making design difficult.





What can HCI (and CCI) learn from the ABC?

Firstly – from A, we need new methods for evaluation and specification of interfaces. We can learn from games design and from affective interface design, both of which are not task-based.

Secondly – from B, we cannot design products for children without getting to know them. We need to have interfaces that can be made usable for the least literate children as well as fun for all children.

Thirdly – from C, we need both children and adults to evaluate and design together. Both can learn from each other.

This is in part a definition of, and an agenda for, CCI. Research is needed to establish the answers to all sorts of core questions. How can we help adults carry out effective heuristic evaluations of interfaces for children? In what ways can children effectively contribute to the design of interactive products? Are there guidelines that can be used to ensure accessible software for children across all literacy levels?

Child Computer Interaction needs to begin to grow up. We can learn from the experience of the HCI community; perhaps we want to build fields rather than brick walls and flying saucers rather than ladders! (Cockton, 2004), but eventually we will also have to decide what the value of the interface is, where that value is leaking out and what are our own grand challenges (Thimbleby, 2004).



References

- Cockton, G (2004) Three and a Half Decades of HCI: Three Brick Walls and Half a Ladder. *HCI2004* Volume 2, pp 17 – 20 (Research Press International).
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Janet C Read

The Child Computer Interaction Group

www.chici.org

Interacting with Computers Special issue: Design for Civil Society

The January issue of *Interacting with Computers*, edited by Steve Walker and Andy Dearden, focuses on Design for Civil Society. This special issue includes the following papers:

Designing for civil society

S. Walker, A. Dearden; pp 1–8

Participating in civil society: the case of networked communities

A. Kavanaugh, J.M. Carroll, M.B. Rosson, D.D. Reese, T.T. Zin; pp 9–33

Net neighbours: adapting HCI methods to cross the digital divide

M. Blythe, A. Monk; pp 35–56

Fairtrade.com versus Fairtrade.org – how Fairtrade organisations use the Internet

D. Kleine; pp 57–83

Online design for bilingual civil society: a Welsh perspective

D. Cunliffe, D. Roberts-Young; pp 85–104

Programming for cognitive justice – Towards an ethical framework for democratic code

M. van der Velden; pp 105–120

Interacting with Computers is the interdisciplinary journal of human–computer interaction associated with the British HCI Group. The journal is edited by Dianne Murray and is published by Elsevier.

As a member of the British HCI Group, you are entitled to highly preferential subscription rates for major HCI publications by Elsevier, including *Interacting with Computers* and numerous HCI books.

For more information about *Interacting with Computers*, see <http://www.elsevier.com/locate/intcom>

HCIEd-8

25–26 April 2005

BCS London, Covent Garden, London

HCIEd-8 is the 8th Workshop on Human–Computer Interaction Education and Practice. It is organised by the BCS HCI Group's Education and Practice Sub-Committee, and will be held in the BCS London premises in Covent Garden, in Central London.

The HCIEd series of workshops is usually held twice a year, once at or around Easter, and the second at the BHCI Group's annual conference in September.

The purpose of HCIEd-8 is (i) to identify best practice in HCI education and training in university and industry, and (ii) to understand the definition of the systems ergonomics component of the Skills Framework for the Information Age, SFIA, used to define industry-based achievement levels, and how that might inform our education and training practices, and in turn how we might influence the re-development of the SFIA, which will impact the criteria for HCI accreditation.

Call for Papers

Third International Conference on Active Media Technology (AMT2005)

May 19–21, 2005

Japan

Accepting late-breaking results papers until

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Can we do better human–computer interaction by observing human–animal interaction?

10th International Conference on Human–Animal Interactions

Though it is many years ago now, I can still vaguely remember watching Skippy the Bush Kangaroo on Saturday mornings and school holidays. This seminal TV drama featured a recurring scene in every episode: the bush park ranger, gazing sincerely into the eyes of a gibbering, twitching kangaroo and uttering something along the lines of “What’s that Skippy? – the kids are stuck in a waterhole just this side of Kylie’s Creek?”

Animals may routinely interact with humans in ancient sixties kids’ TV programmes, but what do most of us know about how animals interact with humans in reality? There are many dog-owners who will swear that their pet can read their mind, communicate effortlessly, and do just about all the things that Skippy seemingly used to. Dogs cannot, of course, read our minds – it is just that they are incredibly adept at interacting with us. This ability is something that is genetic – even puppies have been shown to be able to understand interactions with humans better than, for instance, chimpanzees. A few tens of thousands of years of evolution have enabled domestic dogs to become so finely tuned to human behaviour that they can easily interpret cues so subtle that even other humans cannot notice them.

Some computer science researchers, in areas such as affective computing, have long since recognised the importance of social interactions with animals such as dogs as relevant, if informal, models for the development of human–machine interfaces. For instance, Bruce Blumberg’s Synthetic Characters Group at the MIT Media Lab have reported a number of increasingly sophisticated simulations that exhibit both dog–dog and dog–human interactions. Alongside this, observations of dog–human, and other creature–human, interaction have been used by researchers to inform the construction of a number of, mostly entertainment-based, computer systems; indeed a number of commercial software simulations (such as *Catz* and *Dogz*) have been available for some time. Alongside these software developments, dog-like robotic toys, most famously the Sony Aibo, can now be purchased as consumer products.

However, I personally feel that we have barely scratched the surface in this area and that there is great scope for undertaking multi-disciplinary research as computer scientists and engineers alongside animal behaviour specialists from disciplines such as psychology, sociology and biology, to try and use observations of our social interactions with creatures, and particularly dogs, to try and inform the development of human–computer interfaces. With this in mind, I attended one day of the 10th International Conference on Human–Animal Interactions hosted by the Society for Companion Animal Studies (SCAS) on behalf of the International Association of Human–Animal Interaction Organisations (IAHAIO) which was held from 6–9th October 2004 at the SECC in Glasgow. This is the premier international meeting on human–animal interactions and this year drew an attendance of 500 delegates from around the globe. I went along to the event on day two – principally to sit in on the Robotics session that day but also to try and briefly immerse myself, for a change, in an entirely different discipline.

The plenary presentation of the morning session I attended was given by Liz Paul from the Centre for Behavioural Biology at Bristol University and focussed on understanding of empathy with animals from a psychological perspective. This was quickly followed by a session on people’s attitudes to animals – mostly the emphasis here was on what influences different types of person, or people with different backgrounds and experiences, in their behaviour towards animals. This was all very reminiscent of studies that might be done when examining subjects’ performance in computer-based tasks, and also of ongoing work in developing empathetic interfaces.

An area which is very active in our own field at the moment is that of assistive technology – see the summary of the Home and Electronic Assistive Technology Workshop in *Interfaces* 59, for instance. As part of this area, the evaluation of the introduction of technology into environments such as care homes for the elderly is also receiving a good deal of attention. The next session I attended at the IAHAIO event, called *Pets & Older People*, was extraordinarily relevant to the progress in the area of assistive technology for vulnerable sectors of the community. Several presentations demonstrated that the simple act of providing a focus of attention and discussion for residents in special care units for those with Alzheimer’s disease improved quality of daily life for both residents and care workers. At IAHAIO this focus was provided by animals – usually dogs, but also even fish – and it was easy to see possible links to our own field which is striving to provide technological substitutes for these agents.

The post-lunch Robotics session continued this theme. Mostly, the session featured studies of Aibo being placed in the community – either in schools or in elderly care homes. Typically real dogs were also used in parallel sessions alongside Aibo. Subjects were then asked to complete questionnaires about their interactions with both real and robot dogs whilst observational data from interactions was also analysed. This was clearly a hot topic, and many of the researchers present had undertaken collaborative work with each other which spanned Europe, USA and Japan. Although



Aibo was clearly an initial hit with many subjects in the studies presented, almost all researchers drew attention to the fact that, after a while, Aibo began to suffer from a lack of attention from the humans around it. A discussion ensued as to whether this was because Aibo was too complex a device to get to grips with and the subjects became bored – or, even, that it was because Aibo was not furry and therefore wasn't as cuddly as his real counterparts.

Having watched some of the video presentations of Aibo in schools and residential homes, however, it seemed to me that the problem was obvious – Aibo just doesn't behave like a real dog. One video showed a girl attempting to play with Aibo – who showed no interest whatsoever; a real dog would at least have tracked the girl around the room using its eyes and by turning its head – but not Aibo – who simply gazed at the wall. What was lacking from the otherwise fascinating work that was presented was any notion that we can use such studies to better inform the development of, firstly, toy devices like Aibo, but in the longer term, any computer device from which we expect recognition of things like affect, and attention – both of which are currently highly active areas of HCI-related research.

To make advances in our own area of HCI I believe we need, amongst other things, to make progress in understanding the social cognitive processes that go on between animals and humans. Building robots, or software agents, that

supposedly mimic this interaction is a remarkably fashionable area of research – though much of this seems a little premature at present given that leading researchers in human–animal interaction and ethology (animal behaviour) will emphasise the amount of work still to be tackled in their respective fields. For instance some dogs are so fine-tuned to their owner's behaviour that they can even tell when they are about to have an epileptic seizure – computers cannot reliably do this (for instance using EEG signals) – but nor do we understand how dogs do it. One poster presenter at IAHAIO with whom I discussed these ideas was Márta Gácsi from Eötvös University in Budapest. Márta's group has brought about some great advances in our understanding of social cognition between humans and dogs in recent years, and has even pioneered the use of video-mediated interaction between dogs and their owners. In future I foresee some extremely profitable collaborations between people from our own disciplines and human–animal interaction researchers like Márta – and who knows, in a few years time we may even get to consign Aibo to its rightful place in the toy cupboard and get to play instead with an affect-aware, empathetic mechanical Skippy (only kidding).

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Colouring in HCI2005: the bigger picture

Tom McEwan



In our school of computing, the Multimedia & Interactive Systems Design Group are apparently referred to as the "colouring-in group". Oh, these software engineers are

such wags. But as well as the screen design that makes their software more usable, we can help fill in the gaps when it comes to articulating the needs and defining the requirements. They love us really, and they need us for sure.

True to form, the logo for HCI2005: The Bigger Picture has 16 square-ish windows that you can colour any way you choose. It's based on the signature window of the new Lindsay Stewart Lecture Theatre that will be the heart of the conference. But the logo is there for you to do things with – we didn't want one that lay there gathering dust, just as we want to create proceedings this year that will be well-thumbed and frequently cited. This is, after all, the British HCI Group's coming of age conference – the 19th in our own right and adding the two INTERACT conferences that we hosted as well, makes us 21 this year, and we want the keys to that door, and we want our ideas in the world, in use and making a difference.

Our other keynotes are still being confirmed as I write but *Interfaces* can exclusively reveal that Mary Czerwinski, senior



researcher and manager of Microsoft's Visualization and Interaction (VIBE) Research Group (<http://research.microsoft.com/research/vibe>), and SigCHI VP, will present the opening keynote at HCI2005: The Bigger Picture, and the closing keynote will be Professor Alistair Sutcliffe, Director of the Centre for Human Computer Interface Design in Manchester.

The last few weeks Radio 4's Today programme has woken me each morning with yet another disastrous story



about *technology* failing *people* trying to carry out *activities* in *contexts*. All the software and hardware engineers and database administrators seem to have spent so long trying to make things function that they have lost track of managing expectations, predicting and meeting changing needs, and understanding people who are not the same as them and the people they know. Apparently the official advice, to keep your PIN secure in shops, is to “cover the hand entering the number with your free hand”. Leaving aside the accessibility issues for those who only have one or fewer working hands, didn’t they notice that people might be holding their shopping, a toddler, a purse or a wallet in that hand. Even setting all that aside, what about the social issues of the signals that you send to your friends and neighbours in the queue that you don’t trust them not to try and find out your PIN.

We see these things, we point them out, but are we managing to change them? When we do, do we “manage the story” – at lunch yesterday a colleague in our Design School was laughing at American drive-in ATMs having Braille pads – yet another political correctness inanity. Now we might recognise why, we might envision a dozen scenarios where this would be helpful, but unless we communicate the pictures we can paint, he’s not listening (always end a rant with a mixed metaphor!).

By the time you read this, the 36 members of the conference committee will be hard at work with the logistical arrangement, reviewing and selecting the full papers, tutorials and workshops, and in a few weeks’ time (early April) we will have set the delegate fees, opened the website for registrations, and be awaiting your final submissions in all the other categories by May 10th. We will also have provided on our website news about this year’s innovations – the conference fringe, which will be the antithesis of the conference, yet a place where we can access and influence people we don’t usually reach.

Our venue is magnificent. I’m rarely convinced by university architecture – too often the budget is spread too thin, but they spent effectively the £25m adding an inspiring confer-

ence and teaching venue to the historic Craiglockhart Hydro building, where the echoes of War Poets Owen and Sassoon still reverberate. It’s a beautiful, moving venue, with lovely views across to the castle and the facilities that continue to delight me. The Prime Minister even chose Craiglockhart a few weeks ago to set out his stall for the election.

Edinburgh in the week after the festival (Sept 5th–9th are the conference dates) is a magical place. All the substance is still there even as the bunting is removed and the tinsel lines the gutter. The art galleries and museums still have running the world-class exhibitions that hundreds of thousands fought to see in the previous four weeks, but now they’re quiet and contemplative places. Sometimes an innovative venue stays for a week or two either side of the festival. In a few weeks’ time the lights start to come on in the buses on your way home from work, but for now the evenings are still light and rain doesn’t usually get much closer than Glasgow.

Accommodation will be clustered around nightlife opportunities, yet only a short bus-ride or a two-mile jog/stroll along the Union Canal from the conference venue. One hundred places in a hall of residence next to Haymarket train-station will be available – they will go fast, so book early, though there are many good quality cheap hotels near Haymarket, or just up the road at Tollcross (but book as soon as possible if you intend to arrive on the Sunday evening, as some festival-goers make that their last night).

With the international festival’s fireworks display on Sunday 4th to kick things off, Lachlan MacKinnon is planning a social programme that you’ll remember forever, and instead of the pain of conference coaches, we have arranged free day-tickets for Lothian Buses – the city will be yours while you are here. Around 25 buses each hour take less than 15 minutes to get to Craiglockhart from the middle of the city, with a variety of routes to help you get to know, or resume your love affair with, Scotland’s capital city – check out services 4, 10, 27, 45 and now 23 at <http://www.lothianbuses.co.uk/howto/findRoute.asp>. For those who want to drive in on the day, the conference venue has loads of free car parking.

We’re going to paint the town red, we’re going to see the bigger picture.

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The conference venue gazes down on the Forth and Clyde Canal. Fear not, the snows will have lifted before the conference season.



Experiencing design

Everywhere a sign

Robert St Amant

Once the basic ideas behind user-centred design become clear, some guidelines may seem so obvious as to go without saying. For example, Jakob Nielsen writes, "Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution." This advice applies to most types of information in an interface. A novice designer might think, "Of course – why would feedback or instructions be provided in any other way?" Giving users information that's timely and appropriate, however, even for very specific situations, can be harder than it seems.

We can see this in our everyday environments. Consider signs, which often play a comparable role to informational dialogues and error messages in software. Although the state of knowledge concerning correct wording, visual design, and placement of signs has had decades to evolve, almost everyone can think of examples of signs that are inadequate, inappropriate, or even deceptive.

One of the classrooms in which I teach offers a vivid example for my students. On a solid wooden door at the front of the room, behind the lectern, a large white sign with red letters reads, "Fire door. Do not block." The meaning is obvious, except that if you approach the door to see how it works, you find that there is no way to open it – no knob, lever, or metal plate to push on. Further, the hinges are on the inside of the door, so that it opens into the classroom. A bit of thought leads to the realization that the door is for the students in the chemistry lab adjacent; if a fire breaks out in the lab they can escape into the classroom and from there to the corridor and out of the building.

All well and good, but where does that leave students in the classroom? Imagine a fire alarm going off and the smell of smoke in the air. Students rush to the obvious exit but find that there's no way to open the door marked "Fire door", and that pushing on it is not the solution in any case. When I describe this scenario to my students in the classroom, it usually meets with some uneasy laughter, but also an appreciation for the pitfalls of information design. They take a few lessons from this example.

First, messages are targeted at specific audiences, and messages must be appropriate for their audience. For the students in the chemistry lab, the sign would be perfectly appropriate if it were visible on the other side of the door, but for the students in the classroom, it is less than useless. Second, less information can sometimes actually improve a message: "Important: Do not block this door" would be sufficient in this case. This avoids drawing attention to the function of the door, functionality that is not aimed at those reading the sign. (Recently the sign was taken down from the door, which now stands blank. Though not an ideal solution it is at least a slight improvement.)

Other examples of poor signs are easy to find. My students write,

"On a country road near my town is a small bridge that goes over a creek. A sign on the bridge reads, 'Warning: Bridge floods in heavy rain.' I've noticed that when it does rain and the bridge floods over, the sign is submerged under the water. This

makes it very hard to know that the bridge is out during a rain storm. Some drivers have even missed the bridge altogether in the rain at night."

"I have made three signs with magic marker for customers at the video store where I work. The first one was a 'heat death' sign made with bright colours and an illustration of fire, with the warning not to leave tapes in the car. The second sign explained how discounts work. Again, I used bright colours and made the important, attention-grabbing parts larger. The third sign, complete with examples, explained the difference between 'widescreen' and 'formatted to fit your TV.'

I thought my signs were great because they were easy to read quickly and didn't include extra information. Much to my dismay, the owners decided to 'improve' my signs by making them on a computer and printing them out. They didn't make the new signs balanced, with some parts smaller and some larger, bright colours, etc. As a result, I noticed people NOT SEEING the signs any longer. I kept getting the questions that my home-made signs had been answering for them. It's true, I could just be bitter that my contribution went unnoticed and was tossed aside. But I felt the home-made ones really were easier to read than the ones made on the computer, and when the customers obviously aren't reading them any more, well, that only confirms my belief."

These examples emphasise further lessons about the importance of visual design, layout, and proper placement of information. If relevant information is not available at the right place and time, it can go unnoticed in the course of the natural activities associated with a task.

In general, one of the most important interface design concepts that students can learn is that the usefulness of information is tightly connected with task context. This can be seen clearly in so-called interface wizards, where users are presented with choices individually or in small groups, accompanied by information about the result of possible actions. The same rules that govern the effectiveness of signs, of which we have mentioned only a few, apply to these sequential dialogues. Wizard dialogues can be specialised to different user populations, with complexity hidden from novice users but with more detailed decisions available to expert users (who in any case can use different, more flexible interface facilities to accomplish their tasks.) The information that users see at any point in their decision-making process can be restricted to the current context, with less immediately relevant details delayed until later or made accessible only on request. Because wizards give users a well-focused view of individual choices in a sequence, visual design problems are much simplified, even if additional constraints on consistency must be taken into account. For user interfaces in many genres, such as fill-in forms and question-answer dialogues, the presentation of information can often be improved if designers are aware of basic rules that make everyday signs effective.

Rob St Amant

<http://www4.ncsu.edu/~stamant>



Communicating on behalf of the British HCI Group

Andy Dearden

One of the changes that I've noticed since taking over as communications chair is how so much of what happens in the British HCI Group can be called 'communications'. Most recently I found myself responsible for 'communicating' (i.e. writing) our responses to the European Commission's 'challenges for Europe's Information Society beyond 2005' via the BCS. The consultation documents asked respondents to identify the top three priority areas for national government policy and EU level initiatives. One week to respond left me little time to consult with others.

Like most members of the group I suppose I feel that the European Union should be in favour of good HCI and should be supporting 'good things', but deciding on the precise areas that we should highlight for policy makers is not easy. Should we emphasise areas such as professionalism in IT services, enhancing the IT skills of citizens, promoting e-Inclusion and citizenship, building trust and dependability. Other BCS specialist groups emphasised interoperability and data management – which are important for our interaction with systems but perhaps we would see them as technical issues that should be driven by broader human concerns.

I don't want to dwell on the responses I gave. (The BCS response, and our contribution to that response, will be available online soon and we'll publish the URL in a future issue.) Rather, I want to use this example to reflect on how the group manages communications. I teach my students that six useful questions for thinking about any problem are: why, when, where, what, who and how?

Why do we communicate as the British HCI Group?

Writing our responses to the Commission reminded me that my words would have greater weight because of both the membership of the HCI group and the broader weight of the BCS as an established and chartered institution. Not only did the group add weight, but the organisational structures we have in place to discuss such matters meant that I was not completely alone in formulating a response. However, at the end of the day, my response was eventually folded into a BCS response which both adds weight, but also perhaps dilutes the specific perspective of HCI. An additional route to influence European policy might be the creation of some sort of federation of European HCI/Ergonomics/Usability groups. Has the time come for such an initiative?

When do we communicate? The example above was stimulated by an external request through the BCS. But always operating in a responsive mode is not satisfactory. Internally we have a regular timetable of communication events. Usability News and *Interfaces* have a regular publishing schedule. BCS HCI News is moderated and distributed on a roughly weekly basis. But our external communications seem less planned at present. Perhaps we need an additional small team to make use of our existing information networks to generate broader publicity?

Where do we communicate? Should we put more emphasis on getting stories into the national press to promote HCI generally, communicating with surrounding professional communities (computing, design, etc.) through professional journals and magazines, in internal networks to HCI professionals and academics, or should we be seeking to increase our influence in governmental bodies such as local councils, UK government or the European Commission?

What do we communicate? If I sat with any one of you for a day to write our response to the Commission, our response would have been different, perhaps significantly so. The British HCI group does not have a particularly formal policy-making system. Executive and COG meetings are largely concerned with the business of running the group. The mailing lists such as hhcig-exec@jiscmail.ac.uk are discussion lists, but we rarely pass motions or vote on policies. I don't think that we want the group to operate like a political party, but do we need a distinct forum for eliciting members' opinions when we respond to consultations such as these, and how do we prevent our responses being dominated by vocal minorities (myself included)?

Who should be doing the communicating? The communications team are primarily concerned with editorial and market research functions. We keep the channels open, we monitor how effective our communications efforts are, we may have skills in writing and distributing press releases. But it should not be the communications team who decide on and provide the core content. That has to come from the whole membership.

How do we communicate? Ultimately through the efforts of volunteers. There are many ways you can help. If you want HCI to be taken seriously and can help us improve our communications, please drop me a line. The communications team needs your help.

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Call for Papers

Special Issue of *Interacting with Computers* on HCI and the Older Population

You are invited to submit a paper to this publication on any aspect of this topic, including user studies, design guidelines and methodologies. Papers on a large range of application areas will be considered as long as they address wider issues in this field. Suitable application areas include, but are not limited to: information browsing, communications, the internet, mobile devices, smart homes, health applications and entertainment.

Submission deadline
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http://www-edc.eng.cam.ac.uk/~jag76/cfp_iwc.html



Is white a colour?

Alan Dix

I think it was two years ago just after New Year I received an email, the result of a “we’re back at work, but wish we weren’t” discussion.

we are having one of those discussions at work, debating if white & black are colours.

... In the spectrum, is white the result of a compound of all colours?

Is black the result of total absence of colour? Do actual colours (e.g. ink or paint) have the same properties as light, do then the colours white & black exist?

My first thought was “Wow, what a question!”, and then I found the answer was even more rich than I had imagined.

First, the answers for white and black are a little different, so I’ll note this when important. Also I found ‘answers’ at three levels: cultural/linguistic, physical and perceptual ... and the last has three aspects itself!! As with any question, however, the answering is as much a questioning of the question and the deep question it drives us back to is “what is colour?”

Culture and use

Wittgenstein basically says (which I don’t completely believe, but let’s stick with it) that we should not worry about looking for an objective meaning of a word – the word is defined by and in use – it is how it is used by people.

A woman walks into a clothes shop and says “I’m looking for an evening dress”. The salesperson asks: “what colour were you thinking of?” Would white or black be valid answers?

I think so. But of course if you were an amateur photographer and someone asked you “do you take colour”, then you would say “no” if you only took black and white ... So much for Wittgenstein.

Physics

One way to define colour would be via wavelength of light. A pure light of a given wavelength (like the strong sodium yellow) is a colour. This would include all the colours of the spectrum, rainbow or standard colour wheels. By this definition white and black would not be colours since white light is always a mix of wavelengths and black is none. However, this would then not include ‘unsaturated’ colours like pink. Pink is pure red mixed with white – there is no ‘pink’ wavelength. This ‘spectrum’ definition of colour is called ‘hue’ and is perhaps the closest we can come to a clear idea of colour at a physical level.

Physically at least one can see that black is special, being the absence of light. It is a ‘coming together’ point in that all ‘colours’ move to black as their intensity reduces. So black is at least (physically) unambiguously defined.

White is more difficult. It is always a mix, and in fact different mixes will all appear white. I’m not even sure whether a uniform mix of wavelengths will give you white – especially as there are two completely different meanings of uniform – do we mean equal numbers of photons, or equal

energy in each frequency? I think it is close to the equal energy, but I’m not sure (more on this below).

Surface perception – the eye

Here we get closer. The reason we see colour at all is because we have eyes. Furthermore the reason that all colour systems have essentially three dimensions is because we have three kinds of colour sensor (called cones) in our eyes. Because of this it is possible to have a light source consisting of some pure red light and some pure green light and have it appear yellow, even though there is none of the wavelength for yellow in the light we see. This is rather like in music if we heard a C and G played as a chord, but heard the E between them (see www.hcibook.com/alan/papers/is-white-a-colour-2005/ for more about this).

We see a mix of red and green light as yellow simply because the combination ‘excites’ our three types of colour sensor in exactly the same way as the pure yellow light would. Two things look the same ‘colour’ (and here I will include black and white) if they excite the three sensors in the same way. Again black is easy – no sensor is excited at all! Hence wavelengths of ‘light’ outside the visual range (e.g. ultraviolet or infrared) appear black even though there are actually photons hitting the eye. White – well there is a particular mix of red, green and blue that ‘looks’ white, but equally well there are lots of mixes of wavelengths that look white.

Ecology – the sun

As I said, I’m not sure of the exact mix in terms of wavelengths that give white, whether it is a uniform mix or not. But actually we can understand white in terms of the sun. Basically, white is the ‘average’ of all the wavelengths that reach us from the sun. I say ‘average’, as if we look (as of course we shouldn’t) at the sun it looks yellow, but this is because the blue light is scattered by the atmosphere reducing the direct blue light hitting us, but making the sky blue. The ‘average’ is white. This is sensible, our eyes record only the deviation from the average – the average itself is nothing – white.

I say this with confidence, but I’ve not done the accurate measurements myself. But I don’t need to ... mother nature has helped out (she of the white lab coat). Snow and clouds scatter all light that hits them uniformly – blue from the sky and direct light from the sun, re-mixing them for us ... and they are ... white.

So, imagine an alien coming from another planet, with a sun of a different ‘average’ colour (say a bit more red). The aliens of course call things ‘white’ if they are the same average colour as their own sun. They look at a post box (UK) and say – “what a pure white box”. You show them a white sheet of paper and they say “a little green, I prefer white paper myself”.

So white is relative to where in the universe we find ourselves. It would therefore be xeno-species-ist to call white anything other than colour.



Black, however, is different. When faced with no light whatsoever (in either of our visible ranges) we could happily agree with our alien that it is black.

Deep perception – the brain

Well, that is almost the whole story.

However, there is a last twist – isn't there always? You may have seen before the way that if you put a patch of a colour on a background it will look different depending on the background's colour. If the background is strong red, then the colour will look more blue/green; if the background is blue, the colour will look more yellow.

The reason for this is that our eyes and brain between them are trying to adjust their sensors so that things look pretty much the same colour no matter whether it is near sunset with a largely red tinge, or the sun is behind a cloud so that the light is more blue from the sky.

You notice this if you take a photograph inside under an incandescent bulb. The colours appear 'natural', but in the photo everything has a yellow tinge. In fact the photograph is accurate, the things really did have the yellow tinge because of the yellow light, but our eyes have adjusted so that things 'look' right.

The same things happen with dark and light. The difference in the quantity of light hitting our eye in bright sunlight compared with a cloudy day, or inside, is many thousand-fold. But things do not look that much darker inside unless you go quickly between the two. Our eyes again adjust.

Now imagine a TV screen when it is off. Depending on the screen it may be a dull grey, or perhaps slightly grey-green, colour. Now turn on the TV and imagine a person wearing a jet black jacket. Now the 'black' parts of the picture are just those places where the TV is showing no additional light ... that is the 'black' is the same colour as the TV screen when it is off ... a green/grey.

The effect is even more dramatic with a projector screen. It is white... Now take a slide with, say, a black cross extending across a white slide. Turn on the projector... You see the black cross. But the 'black' is simply the parts of the screen that are not illuminated by the projector. That is the same 'white' as the screen.

On a sunny day you drive down a road and are about to go under a wide bridge. It seems black underneath. But once you are under the shade of the bridge the colours appear – including the white snowdrops by the roadside. Even black is somewhat relative!

So, now you still don't know what colour is or black or white... but perhaps, if this is new to you, then you may know better that you don't know.

Strange that the more one knows, the more things are like this.

Paint on the page

The question also asked:

Does the same apply to light as to actual colours, e.g. paint?

The colours you see on a surface are the wavelengths it reflects. The rest of the colours are absorbed (slightly warming the surface) – so a red surface is one that absorbs light in the green/blue end of the spectrum (see diagrams on the web for a bit about why paint works the way it does (subtractive versus additive colour)).

White paint (or a white coloured surface) is simply one

that reflects all or most of the light hitting it and does so uniformly (does not favour any particular wavelengths). It may actually look red, green or black depending on what coloured light is hitting it, or no light at all. It is because the colour white reflects everything that white (or light coloured) fabrics are cooler in summer.

Black paint just absorbs everything (or nearly everything, you may get shining glare on a wet 'black' road). There is an interesting paradox in that things that absorb colours when they are shone on them tend to emit the absorbed colours when heated themselves.

This is why a black road gets hot – it absorbs all wavelengths. Conversely, radiators are black so that when hot they emit a lot of their energy. 'Modern' radiators are often metal painted white, but this is because they are primarily not radiators (radiating heat), but convectors (heating air in contact with them which then rises). In fact I think the old Victorian black radiators are mainly convectors as well, the Victorians just liked black.

And the aliens ...

Finally, back to the aliens ... show them a sheet of white paper on their own planet ... it reflects all colours evenly and so has (to your eyes) a red tinge, but they see "pure white". Of course if you look at the same sheet under our light you say "it is white" and they say "a bit greenish". So earthling white paint would count as white paint on our distant planet and also here.

The same would be true for black paint that would absorb all light on both planets and be perceived as equally black on each.

And, of course, the perceptual effects for black and white would also be true on the distant planet, so the grey paint on a white background might look black both on earth and Alpha Centauri.

This article with extra notes and links can be found at

<http://www.hcibook.com/alan/papers/is-white-a-colour-2005/>

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HCI bumper stickers!



A quick Google shows that while you can easily buy a bumper sticker on humour, politics, hobbies... and a whole raft of weird things, a bumper sticker related to HCI, human factors, and all things usability-related, is harder to come by. The obvious answer is to design one yourself.

How about, for example, "This vehicle is driven in context" or "Designed by humans, built by robots, drives like a government software project"? Or can you do better?

Send in your ideas and we'll print the best. Vas, the former webmaster of the British HCI Group, will get the very best message made up to adorn his new car (see the photo).

1. Thanks to Tom McEwan for kicking off

How usable is Jakob Nielsen?

Frank Spillers

Jakob Nielsen has an unhealthy monopoly on Usability Consciousness. He promotes best practices, he preaches obedience to his guidelines and when he postulates opinions they are interpreted as instructions.

So what's the big deal? Jakob is an internationally recognised usability "celebrity". His books sell many copies and his website [1] gets lots and lots of traffic.

Who is Jakob Nielsen?

Jakob Nielsen has become a hot item over the last five years with regard to website usability. Jakob Nielsen has a computer science PhD and is Danish by origin. See his bio [2] for more... The Danish part is significant, I think, because some of his prophecies get lost in translation.

For instance, Nielsen said: "In the future, first of all, websites will be designed by my guidelines ... for the simple reason that if they don't, they are dead."

Some colleagues of mine at a former company said "Look at that, Nielsen says if you don't do what he says you're dead [meat] (American slang for a threat)". If you re-read the quote, I believe the implication Nielsen was making was "you will disappear – become extinct" not "if you don't listen to me you are toast".

So what's the problem with Jakob Nielsen?

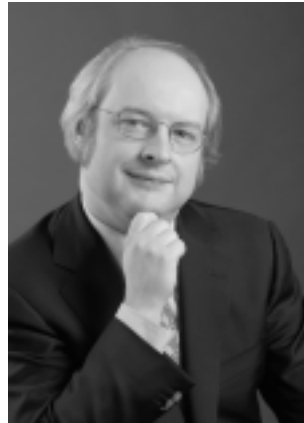
Jakob Nielsen is still very popular outside the usability community. Amongst his colleagues, however, his popularity has been eroding steadily [3]. Why? There are a couple of reasons for this.

1. *Guru Role* Nielsen plays up the guru role and gloats in the press coverage of being called a "king" a "guru" and "almost as big as Elvis" [4]. Gurus seem to fall into two categories: the silent and humble type or the boisterous and arrogant type. Nielsen has been perceived by many as falling into the later category. However, I think the real gurus are his public relations firm, the Antenna Group, who are responsible for his glamorous international media coverage.

2. *Professional ethics* A few years ago (circa 2000), Nielsen posted on his home page that his fees were roughly \$35,000 for a half-day high-level strategy consulting session. This is where the credibility started to erode for me. If anybody thought usability was expensive, Nielsen certainly contributed to that perception despite his current claims that usability is cheap: "Usability for \$200" [5] and "ROI for Usability" [6].

Around the same time, Nielsen failed to disclose his personal conflicts of interest in several articles. Before 2000, he always disclosed where he had a conflict of interest (i.e. serving on the Board of Directors) with regard to pitching a vendor product or service in his column. For example, he wrote an article advocating use of Google AdWords and didn't mention he was on the Technical Advisory Board. After doing that several times and being criticised by his peers, he came clean and apologised for not disclosing his conflicts of interest.

3. *Useit.com* Nielsen's personal website defiantly retains its 1997 look and feel. Nielsen's justification for his site seems ridiculous (he says he is "not a visual designer and didn't want to spend money to hire an artist"). Reading between the lines, like many usability engineers, Nielsen does not seem to personally value aesthetics and that shows in his work. His



site is also full of double standards. A check of dead links on his site with the free tool he recommends (Xenu) in his article "Fighting Linkrot" [7] produced approximately 458 dead links (including images, links, spacers, and outgoing links).

Bitching like Elvis

One of the things I have noticed about people who take Nielsen's teachings at face value is that they end up

communicating like him. The blaming, critical, and self-righteous tones that characterise Nielsen's articles and interviews are not to be confused with how a professional usability consultant ought to communicate. Of the hundreds of people I have trained in the past few years, I have noticed the "Critical Jakob" in their findings. The danger is that armed with Jakob's influence, we can assume that we have a hammer large enough to break anything. A reader comment to Jakob's partner Tog a few years ago raised this issue. Tog's response was that this communication style was for marketing purposes only and that it was not the way he and his colleagues speak to their clients.

It's rich to criticise something as if no other dependencies exist. Even better to pretend like you have all the answers and that no humans (with feelings) were ever involved in the design. By taking the *National Enquirer* (a supermarket tabloid newspaper) approach to communication, Nielsen is doing a disservice to the usability practitioner community by not imparting best practices in communicating usability insights. Is it asking too much to have usable communication?

Jakob Nielsen has done a good job of inflaming the people he is supposed to be enlightening. Some examples of the things Nielsen has said that have inflamed people include:

"Flash is 99% bad"

"These companies are narrow-mindedly insular, and populated with lifers." (referring to companies in industries who don't get usability)

"Here are just few examples of the BMW 745i's clueless interaction design" (See the "Open Letter to Jakob Nielsen" that this one provoked [8].)

"PDF: Unfit for Human Consumption" (See the rebuttal from an Adobe ePaper staffer [9].)

The backlash to Jakob Nielsen

While the tabloid marketing approach might get attention, it also produces its share of criticism. There have been many attacks on Jakob Nielsen, some of them humorous (such as the Jakob Nielsen drinking game [10]), hysterical (Nuclear Launch Website Slammed For More-than-three-click Interface [11]), and some more serious (Jakob's Ladder [12]).

Example from *Marketing Profs*, Jim Kukral: "Being Jakob Nielsen" [13]:

Why wouldn't the King of Usability want to tackle the greatest challenge of them all: Designing a beautiful AND usable Web site?



Isn't that what all Web professionals should strive to do? Why does there have to be a barbed-wire fence between designing a usable site and designing a graphically pleasing site?

There doesn't, and to Mr. Nielsen's credit, he doesn't believe there has to be, either, even though his Web site shows me otherwise.

So what's the hold up, Jakob?

2004 is upon us. Perhaps you have a Web site redesign in the works. Or maybe you're finally going to build that company intranet you've been dreaming of.

Are you going to spend the money for a good designer and usability person, or go the way of Jakob Nielsen and forgo the design part?

Obviously, your budget may have something to say about spending extra money on a designer, but don't worry about it. Just say, "Jakob Nielsen doesn't feel it's necessary, why should we?"

Example from *Usability News*, George Olsen "Response: The Backlash Against Jakob Nielsen And What It Teaches Us" [14]

Nielsen has had a bad habit of presenting personal opinions as research fact. The latest example is his rather bizarre claim that 90% of (his proprietary and not-disclosed) usability guidelines will likely be achieved by 2017 (see "Improving Usability Guideline Compliance" [15]).

A personal thorn in my side has been his insistence that blue is – and will forever be – the only appropriate colour for links. Now I have a background in graphic design and I know numerous ways to make clear something's a link. No, I don't have academic research to prove this, but I've got many a successful site. But yet, I still have to deal with business decision-makers who believe Nielsen has "proved" this point.

Example from Clay Shirky's "An Open Letter To Jakob Nielsen" [16]

(Nielsen suggests enforcing his usability guidelines on the web as a way to improve usability)

Let me quickly address the least interesting objection to your idea: it is unworkable. Your plan requires both centralization and force of a sort it is impossible to achieve on the Internet. You say "...to ensure interaction consistency across all sites it will be necessary to promote a single set of design conventions." and "...the main problem lies in getting Web sites to actually obey any usability rules." but you never address who you are proposing to put in the driver's seat – "it will be necessary" for whom? "[T]he main problem" is a problem for whom? Not for me – I am relieved that there is no authority who can make web site designers "obey" anything other than httpd header validity.

Breaking the monopoly on usability consciousness

Usability is about understanding human behaviour. For one person to dictate how customers behave and how a field should apply best practices seems counter-productive. There are many wonderful "thought leaders" in the usability and human-computer interaction world that many outside of the practitioner community rarely hear about. Jakob's colleague Donald Norman is just as influential, if not more, but his contributions seem more palatable perhaps because they help you learn instead of making you feel inferior. Or people like Brenda Laurel (a pioneer in user interface design and 3D interaction) who for a short stint was with Nielsen-Norman Group. And there are many more who have contributed to the field.

Nielsen's famous "heuristics" (guidelines for web usability) are another area that shows that his popularity is more public relations than credit of invention. For instance, few

people realise that Nielsen co-authored the original publication on heuristics with Danish colleague Ralph Molich [17] and then later with Robert Mack and others. Yet you rarely hear usability folks saying "Nielsen-Molich heuristics", it's "Jakob Nielsen's heuristics".

Contributions to developments in the field are compromised if practitioners must tiptoe around the shadow of what Jakob Nielsen said. For example, Nielsen is very vocal about 3D and virtual reality interfaces. He claims that evolution did not intend humans to navigate in 3D space. Since I did my masters research in the usability of virtual environments, it appears to me that Nielsen has never looked at any of the research in 3D usability that has come out of British universities or the Human Interface Technology lab at the University of Washington, for example.

Reforming with research-based usability guidelines

What we need is a reform of how usability is "trickled down" to the masses. As awareness grows to commercial bias or self-serving interests in usability research, we will see a greater emergence of independent research-based usability guidelines, such as those of the National Institute of Health [18].

This article was previously published on Frank Spillers' blog "Demystifying Usability" in April 2004. See: <http://www.usabilitydiary.com/>

Epilogue: This article has been widely read and distributed across the Internet since it was first written (over 10,000 reads). Many who read this article dismiss it as Nielsen-bashing. If that is your conclusion, you may have missed the point. The view of Usability News hit the nail on the head:

Is it just sniping to criticise Nielsen in public? Possibly an element of envy informs some attacks on the man, but it is his stranglehold on usability: What the field means, what it should offer and how it should be done, that drives most commentators to challenge him. Spillers comes into this latter group, assessing the impact of one dominant voice. [19]

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What does belly dancing have to do with computer science?

Gabriella Kazai



“According to his autobiography, Sol Bloom, an American event promoter, coined the phrase ‘belly dance’ in 1893, when trying to stir up public interest at Chicago’s world fair. Although he may have heard the French refer to *la danse du ventre* (the dance of the stomach), it is unlikely that he’d have cared what the dance was called in its native home; he just wanted to attract curiosity-seekers to his exhibit.” This is perhaps not the most typical of trivia to pick up at a Computer Science colloquium. It did however arise, amongst many, maybe less entertaining, but more scientific topics, at the London Hopper colloquium, hosted by Queen Mary University London. It is one of a series of events organised by the Women@CL project (<http://www.cl.cam.ac.uk/women/NatIntro.html>), a positive action programme, aimed to celebrate, inform, promote, and support women engaged in (or aspiring to) careers in computing research and academic leadership. The project, run by Prof. Ursula Martin from CS, is sponsored by various bodies including EPSRC, Microsoft Research, Intel Cambridge Research, and the British Computer Society.

The lively and stimulating one-day event was filled with computing research talks, a panel session, career planning, and networking activities. The list of speakers included both established and up-and-coming computer scientists, who shared their insights into a wide range of computer science topics from information retrieval to teaching machines to reason through the use of diagrams. Hmm, no mention of belly dancing there then, so just how did this topic find its way into the colloquium?

The answer lies with Dr Mounia Lalmas (Reader in CS at QMUL), who talked about the information retrieval evaluation campaign that she has been organising for the past three years in collaboration with Prof. Norbert Fuhr at the University of Duisburg. In her talk, she added a new twist to the subject of belly dancing by employing it as a means of introducing the basic workings of information retrieval (IR) systems, and in particular the fundamentals of XML retrieval systems. The markup language, XML, is seen as a promising way of supporting high precision retrieval, whereby the explicit structure of documents is exploited in order to return to users, not whole documents anymore, but the exact fragments of interest. The evaluation of such systems,

however, presents new challenges, as many assumptions of traditional IR evaluations are no longer valid in XML retrieval. These issues form the focus of research within the INEX evaluation initiative. Funded by the DELOS network of excellence in digital libraries, INEX is building test collections and setting up appropriate evaluation metrics, a major requirement in order to define and measure advances being made in the state of the art. Now in its fourth year, INEX has become a large-scale operation with over 50 participating organizations worldwide. It supports an ever-increasing range of activities, such as relevance feedback, interactive retrieval, natural language processing, and heterogeneous collections, with new tasks such as question answering, multimedia, and document mining to be added this year.

A variety of other topics were covered. Dr Sherry Y Chen from Brunel University presented her work on personalised hypermedia environments based on a cognitive approach. Dr Mateja Jamnik (EPSRC advanced fellow at the University of Cambridge) challenged us to think of a not-so-distant future, where machines are able to reason – through diagrammatic and symbolic reasoning. Sandra Tury (CS PhD student at QMUL) discussed the information-seeking behaviour of online distance learning students, a research area with many new challenges. Finally, Prof. Donia Scott (Head of Institute at the University of Brighton) enthused us about her work on the use of layout in natural language processing.

The panel session focused on three questions concerning future topics in computer science research, characteristics of a research leader and the help needed to become one. A summary of the discussions is available at http://www.dcs.qmul.ac.uk/~gabs/londonhopper/londonhopper_minutes.pdf

My personal experience of the colloquium was very positive. I was very much inspired by the friendly atmosphere, the ready-to-help attitude of the participants (both men and women), and the general enthusiasm shown.

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Looking for the next best thing

My long-awaited bundle of PalmOne Tungsten 3 plus GPS finally turned up one Friday, six weeks after I ordered it from Dabs. I hate to think how much the price has gone down by in the interim.

I certainly received several infuriating emails from Palm announcing the T5 while waiting. This is the first Palm PDA that finally begins to outstrip comparable PocketPC machines in power and memory. And boasts yet another OS upgrade (but still not yet the really big upgrade from Garnet to Cobalt, the new brand-names for PalmOS 5 and 6).

PDA misery

The first challenge was installing it all on my work desktop PC, running XP professional. This had Palm's software installed to support initially my Tungsten T, and was then upgraded to support a new Zire 72. The T had served me well for around two years but, like the Palm Vx before it, frequently loses its screen calibration, especially after changes of temperature, or using the docking cradle.

I once found a discussion site in German that suggested that the Vx problem was with the casing, and using a hairdryer to melt the sealant then taking the machine apart, etc., would fix it, but I'm too scared to trust Google's "translate this page" facility to that extent! The support for Palm products seem to have degraded in the last few years. Official repair channels are expensive and mean the loss of your PDA for months at a time. Every model seems to come with a new OS, they break down far more than ever before and upgrades and cross-grades are problematic. These are the very things that, five years ago, made me give up on the early PocketPCs in favour of Palm, but now, I fear, the tide is turning.

The Zire 72 seemed to offer all that I want – Bluetooth, DataViz Office, a megapixel camera, memo-taking, video-playing and making, SMS & Web via my phone. It started off disappointing and went downhill. The camera and build quality were inferior to the lower-specified Zire 71 that my wife had, and within a few weeks it had broken down completely and went back for repairs, which took several months. Learning no lessons from this, and with a small budget to use up, the T3-GPS solution seemed worth a plunge.

Grumpy old PDA user bit

I'll digress into GOM territory. Not GOMS, but the age, disposition and gender of people like me.

Having used PDAs for 13 years now (DOS-based HP95LX was my first and longest-lasting!), they are an intrinsic part of my life. In the last couple of years, however, they seem to take up more time than they save and their battery time and life shrink each time. The hardware gets less reliable and the software more buggy.

The original HP95LX (1991) had Lotus 123, an effective document outliner, Quicken and various other applications. I even used bulletin boards through a modem that was bigger than the machine, and installed and ran a C compiler on it. The two AA batteries ran for 2-3 weeks at a time. I could type pretty effectively on the small keyboard and the clamshell

case survived a lot of falls. I picked up a 2MB PCCMIA flash memory card for it for a bargain £250 in a dodgy emporium around NY's 42nd St. "Unconscious portability" was the buzz-phrase, and, though lacking touchscreen and handwriting recognition, it was more of a pocket machine than the ludicrous Apple Newton that came two years later, and which inspired such memorable Doonesbury strips. Some might say PDAs today still lack effective handwriting recognition.

The uncontrollable sense of syncing

It's frustrating that PDA applications today still work best when you use them with only one PC and one Palm. Even then you can have problems – usually due to appointments popping up reminders on both desktop and PDA and closing these reminders at different times. Having several PCs to sync with, magnifies the problem and leads to inevitable version control problems with rather more brutal solutions ("in case of conflict, Handheld overwrites Desktop" or vice versa), than the elegant version-tracking we perfected in software configuration management more than a decade ago.

Having a more geeky option – several PDAs and several PCs – just doesn't work at all unless you compartmentalise applications and data on each. "Never have more than one diary" is still the soundest piece of advice to give to the disorganised, but I long for a PersonalMESH © that allows me to pool data and power in a series of pocket Bluetooth devices that may or may not be with me or battery-charged at a given point in time.

Anyway I can grudgingly accept that replacing your PDA every two–three years is both desirable and feasible (though I long for the four years each I got from the DOS-based machines in the days before user-friendliness). Basically, give the old one away to someone who likes tinkering, because they'll do a lot of that.

Meanwhile back in installation

The installation program bounced out immediately with a strange error – the installed Palm desktop was newer than that supplied on the installation CD. That's OK – the Zire had a later version of OS 5.2, so I accepted that I wouldn't overwrite it. I then couldn't progress to the next stages of the install. I tried twice more then gave up. Subsequent web-searching suggests this may even be a bug with Installguard scripts and/or libraries, because now other applications install badly as well. But I synchronised anyway to give me a modicum of functionality over the weekend, and to see whether my calendar downloads OK.

After the Zire 72 went back for repairs, I'd returned to using the T but found that it stopped loading appointments after a certain date. I never did figure that out. Sunday evening I continued trying to get synchronised, but eventually only wiped the calendar appointments from my PDA, though they remained in my Laptop's Outlook.

On Monday I synchronised with the work desktop, got a warning that "PDA had been synced with another machine therefore may result in duplicates". Groan. Synchronised



anyway. Some conflicts identified, went in and fixed them. Later the same day a synchronisation managed to wipe all past appointments (hundreds of them) from Outlook both on the university server, office PC and the Palm. Luckily I still had them on the laptop and managed to extract to an archive and re-import. I decided to hold off on synchronising with my home PC!

My flashy new GPS box

Despite the painfulness of getting a fully functional PDA, I managed to get the GPS system working, although I still don't know how, why or what the lights on the lovely little (about the size of the old PCMCIA cards, but about 1cm thick) TomTom GPS receiver mean. (I increasingly find this with technology. I start off taking a structured, logical approach, and end up hacking a way through the jungle intuitively, come out in the right place, and cannot for the life of me figure out how. I seek solace in anthropomorphic thoughts).

There's a green one and a blue one and they variously flash, stay on and/or stay off. There's one button with the universal symbol for On/Off and there is nothing in the documentation or on the CD or in the website to tell you anything. Pressing the button the first time does nothing. The next time, and thereafter, the blue light flashes once then nothing. Holding it down for three seconds and releasing when the lights come on, makes the green light come on solidly, the blue light flash, then the green light goes off.

So you start to play with the button, the only input option on the device. Eventually it seems to be one light on, the other flashing. Armed with the experiential knowledge that flashing blue things means a plaintive Bluetooth device looking to communicate, and that it takes a while to connect to ("lock onto") the various satellite signals, I conclude that the green light indicates whether it has latched onto GPS. Solid blue + flashing green seems to coincide with a latched signal. Flashing blue and green seems to be an inadequate but present signal.

The blue light flashes for a while. It does this for a minute, and appears to exceed the 8s, 15s and 45s claimed in the sales leaflet [1] (they call it a spec sheet, but give me a break) on the website for hot, warm and cold start. (I eventually found, using Google's site search, a PDF [2] on the TomTom site for a different model that uses the same GPS box that confirmed all this. I'd love to know why the packaging didn't include this).

The first time I put the supplied SD-card into the Palm it sets up fine, connects instantly and I do the Bluetooth mating ritual. After a few minutes, satellites 11 and 22 get to about 40% of required signal strength. I move the receiver to the window ledge to increase the chance of picking up a signal, and get the required minimum of three satellites at 80%. It's a kick to see the signal strength from each satellite varying in real time. Amazingly I then see that I am in a 3D map of Edinburgh only forty yards away from my actual location. That's exciting!!

Our little road/lane features in city maps, but is problem-

atic for taxi and delivery drivers to find. I find it is not listed in the PDA's streets. (The street-naming and numbering conventions for Edinburgh's "colonies" houses warrant a fullpage footnote by themselves). The TomTom website allows you to notify data deficiencies like this and these will be acted on in the next update. The map of the UK contains just about every street in every city and even house numbers, and runs to around 90MB. A second data set supplied is all major roads in Europe, which is around 100MB. These are formidable communal sets of data, and you could end up on the wrong side of the digital divide if the taxis and delivery drivers can't find your address in this data.

Lost, but now am found

Several times on my first day of use I had to give up (based on a screen that says "no GPS device available" as opposed to "no valid GPS signal"), delete the device from Bluetooth trusted devices, and re-establish it, which works most of the time (perhaps after also resetting the Palm). Later I discover that the Tungsten's Bluetooth often gets in a fankle and the easiest thing to do is reset the device, which is irritating and something I rarely had to do with earlier models. Eventually the battery goes on the receiver, and a red light shines where the green once did. The mains lead at home doesn't stretch to the window area, and the GPS reception away from the window is inadequate. Back to the recharger, which is reasonably quick – around an hour.

For my first journey I plot a map across town to my folks' house. It proposes the wrong route – no-one would go that way unless they wanted to be stuck behind white vans. The first alternative route is better but has a lot of traffic lights. The next alternative is a small refinement, so I decide to route via Myerside, the name of a local rugby ground. This is not listed but a couple of adjacent streets share the name, and settling on one of those leads to my normal route. We drive off, me and the subject of my piece in *Interfaces* 46 ('Fun, fun, fun 'til daddy takes the keyboard away!'), Anna, now more than twice the age and ten times the sass.

"Jane", the default voice, tells me to "turn left in 18 yards" (some strange reversed metre to yard conversion?!) ... "turn left, then, turn left at the next junction" and so it goes until I decide to take a detour past the university to pick up some stuff – real journeys, after all, are full of changes of mind and detours. Jane can be replaced by a bunch of some very entertaining foreign languages. "At the next junction bear right", just as I disobey and hang a left up Spylaw Road. This has three mini roundabouts, each of which can lead back to the original route, and, sure enough, 18 yards before each junction, Jane pleasantly but strictly tells me to "turn right". The role of family navigator is stressful at best, but being usurped by a machine is something else entirely. Luckily Sandra's in KL this week or she might not like the way that both Anna and I are impressed by the way Jane remains calm as I disobey these repeated injunctions (I'd better shut up on that subject now).

I have to re-plot the route when I stop at the university and switch off the devices – only because I don't want to



leave £400–500 worth of flashing blue things in plain view in my car while dashing in for the weekend's supply of marking, dissertations and papers. Switching off the Palm means another delay latching onto the GPS signals, and routes have to be re-plotted, but the application remembers the last few places you went to, and allows you to store favourites. Routes take only a couple of seconds to create, and we have a new destination in any case.

We're going to the Royal Commonwealth Swimming Pool, which hosts Clambers – Anna's fave four-storey interaction environment of ropes, slides, padded objects and ball pools. There are a number of POIs – points of information – supplied in the application software: from beaches to cash dispensers, convention centres to stadiums (sic) to which can be added locations of speed cameras and other visitor attractions; but not, sadly, surprisingly, swimming pools. Maybe I can add my own POIs. (Later I find that I can't with this version of the application – I must download an update, installation of which will wipe my Favourites, but first I can't install the update for lack of space on the SD-card. I realise now why not to install the German, Swedish and Dutch options! So I need to delete some voices. But I can't do that except by hacking around with the files on the SD card using my desktop, and so it goes.)

Selecting the destination via the map is an adequate alternative and off we go varying the route as we go. After an attempt to change my mind and a few seconds recalculation each time, Jane re-plots the route to match my new location. This is exciting. The maps are not distracting while driving and in any case I rapidly learn to trust the voice instructions.

So the main purpose for which I bought this device is more than satisfied – I'm pretty delighted with the ease of use of the application and hardware combination, but my troubles are only beginning with the generic aspects of PDA use.

So ... define useful

But the real delight comes a week later en route to Nordichi

in Tampere, Finland. Resisting the temptation to run Bluetooth transmission on the plane, playtime must wait until the airport hotel. The GPS fix is rapid and far clearer than in the urban canyon of Edinburgh, and the map zooms in on the nearby highway. The next morning on the bus, I listen to music through the Palm's RealPlayer, and watch the visual commentary of my journey on the screen match the highways in front of me, detecting each off ramp taken within a couple of seconds. I even get Jane to override the music to announce each turning but, man, does that get irritating. Overall the journey is a delight – I can see what towns we are passing, listen to whatever music I want, and follow what Nick Lowe called the endless grey ribbon [3]. There's a serious lack of usefulness about this, yet I enjoy it immensely.

Just to ensure that there are practical uses for this integrated technology (or at least to underscore why I spent so long trying to get a multifunctional device working in the first place), here's a brief tale of the tail of my journey. After ninety minutes, the battery in the GPS is still going strong, but the Palm starts to lose power. Before I lose Bluetooth, I switch from the route-planning application to my email client, and dig up the address of my final destination, and Bluetooth a couple of numbers into my phone, emerging from the bus equipped for action, needing only a fresh injection of power.

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Book reviews

In this issue we have reviews of four very different books – each of which looks well worth a read.

The inimitable voice of ex-chair Gilbert Cockton kicks off the reviews with a comprehensive look at *Designing Interactive Systems* by Benyon, Turner and Turner – starting with a slight slight but concluding that it is “the best HCI text book I've yet seen”.

Ella Smith follows with a review of *Shaping the Network Society: The New Role of Civil Society in Cyberspace*, which is edited by Douglas Schuler and Peter Day – very appropriate for an election year.

A review of Kim Vincente's thought provoking *The Human Factor: Revolutionizing the Way People Live with Technology* follows. This was written by Hokyoung Ryu, who is based in New Zealand – we are truly an international bunch.

Finally John Knight, a regular contributor, reviews another text book – *The Design Experience: The Role of Design and Designers in the Twenty- First Century* by Mike Press and Rachel Cooper, professors of Design Research at Sheffield Hallam and Design Management at Salford respectively.

I am now busy identifying interesting books for the rest of the year – suggestions are very welcome, especially those which come with an offer to review the book!

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Edited by Sandra Cairncross

Designing Interactive Systems
David Benyon, Phil Turner & Susan
Turner
Pearson Education, 2005
321116291, £39.99

The long awaited new HCI text book arrives for review. You open the package and go straight to the index to look for your name. It's best to check over the really important stuff first. You do. They've got their citations and references mixed up. Honestly, everyone knows the difference between Cockton and Woolrych (2001) and Woolrych and Cockton (2001). As for Cockton and Woolrych (2001) and Woolrych and Cockton (2000), that's even easier. And is Cockton and



Woolrych (2002) referenced but not cited? I rest my case. End of review.

I'm only joking – the authors are solid, reliable people, so I blame the publishers. Here they are with a prospective best seller in their hands and they can't even shell out on decent copy editing. So I gave the book a second chance when I saw a copy on a colleague's desk. She said it was a bit abstract in parts, theoretical, scholarly, something like that. Well of course it would be. At least one of the authors likes that sort of stuff. The preface tells us he doesn't like writing about himself. I do though.

At this point, my two standard book review tactics had failed. I couldn't judge it by how often they'd cited me, or by what others thought. So I jolly well had to have a close look at it and a very good book it is too. If you work in a university, order several for your library now. If not, then try to get someone else to pay, but if not it's worth £40 of any HCI specialist's money. With over 800 pages, that's only 5p per page, many with more than one picture. It's a fun book. I like the student curry scenario, excellent ethnomethodology there; oh, and the barber poles too, every Apple wait will now be an Apollo experience (read the book to find out why).

Abstract, theoretical, scholarly, fun – there's a clue that this is an aptly varied book. Its People–Activities–Contexts–Technology (PACT) approach covers everything from activity theory to GUI widgets. It does all of this well, using Apple and Windows examples, and covering a wide range of off the desktop and collaborative technologies. The book is well designed, with a range of helpful and visually salient features. It is well written. Each author's style does show through at times, but this is appropriate for the material that they each cover (although much is joint work). There will be a web site for the book at www.booksites.net/benyon, which instructors with less than a decade of HCI experience will need. The book covers a lot of ground. For those of us who have lived through the last two decades of HCI, it's great to see so much covered so well, but those still working their way into the specialism will need additional material on the web site.

For older HCI hands, the book is a great way to plug any gaps that you've

developed in the exponential explosion of HCI work. Emerging areas such as haptic and affective interaction are covered. Accessibility has a short but very effective section. Contextual design is covered in depth (just in time for the new Contextual Design book, which will provide further examples). Design and evaluation techniques are given a fresh treatment. Two areas, Information Spaces and CSCW, are selected for treatment in depth, which provides welcome support for final year undergraduate and masters courses, especially given the authors' experience and expertise in these areas.

This is the first HCI text book that I feel that I could teach from. The PACT structure mirrors my preferred approach to HCI. Methods are covered in detail and there are many practical examples, many borrowed from Napier HCI colleagues, who demonstrate what is possible when teaching is underpinned by innovative applied research, but also motivated by leading edge theories. The Scottish focus adds to the credibility of the examples. Having lived in Edinburgh for over 10 years, I'm not sure how much local knowledge is needed to absorb all of the detail. Perhaps the authors could run a tutorial on Edinburgh as Context at HCI 2005.

One notable gap is the near zero coverage of personas. Given their widespread use, especially in the user experience community, this is unfortunate. Luckily, Alan Cooper's lack of a classical education (or just ornery common sense) means that many great web resources are readily found with "personas HCI" via Google. Had he called them personæ, it would be much harder to plug the gaps. Hopefully personas will be in the second edition, along with the right combination of Cockton and Woolrych citations! Accessibility needs more coverage, as do old topics such as guidelines. Claims and patterns get mentioned, but the representation of design knowledge is a critical area which needs systematic coverage, especially when the IT world and public bodies are unable to wean themselves off guidelines. Students need to know how to make sensible use of guidelines (and their pattern offspring).

Overall, it's the best HCI text book I've yet seen. As Napier staff with

large mixed ability classes, their experience of real teaching shows through. Teaching is clearly not what they fit in quickly in between research, but something, with their many capable colleagues, that they take seriously and have resourced well over several years. The material covers all stages and abilities in a teaching intensive UK university, and as such, the world's leading practitioners and researchers can use this book to keep up to date with current undergraduates.

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Shaping the Network Society: The New Role of Civil Society in Cyberspace
Douglas Schuler and Peter Day (eds)
MIT Press, 2004
026219497X, £29.95

Editors Douglas Schuler and Peter Day set out to encourage and support the development of socially positive ICTs. To this end they've garnered 14 contributions assessing the state of globalisation and technology, book-ended by their own chapters which summarise the authors' arguments and the editors' intent. Don't be put off by the lefty Utopianism though: the contributions are both well considered and grounded, either by their relation to specific projects or through a wealth of statistical data.

The basic context of the book seems to be that there is a strong (causal?) relationship between the current path of technological change (mostly concerning the Internet) and increases in globalisation (in terms of local communities losing control over important aspects of their lives to transnational corporations and powerful organisations like the World Bank). One aspect of this is the colonisation of the Internet by organisations primarily motivated by profit. This could be ameliorated by technologies specifically developed to empower people and their communities. Those of you familiar with Manuel Castell's or Howard Rheingold's work will need little introduction to these ideas.

Network society theories about the Internet's potential to host a reinvented public space have been around for longer than the World Wide Web and some of the projects described began in the early 1990s.



Also, similar books have been published on this topic – notably Hague and Loader's *Digital Democracy: Discourse and Decision Making in the Information Age* (1999), so I'd quibble that this is a 'new' role – more an 'update'. The timing of the book itself is also interesting, arising out of a symposium in 2000 and published in 2004. There is an awareness of negative changes in online culture and media, without the book being overrun by post-September 11th issues.

This book will be valued by anyone interested in the intersection of technology and society, particularly 'lefty optimists', although there's some great data for pessimists too. In HCI terms, the participatory nature (or not) of the projects' development and practical and innovative use of various technologies, are important themes. Four long-term community network projects are also discussed with useful insight.

The book is logically structured into three parts. However, impatient readers may prefer to start with Part II, *Global Tales of the Civil Network Society*, where the pace picks up, and come back to Part I, *Civilizing the Network Society*, when they've settled down a bit.

The first part sets the context, outlining the current situation globally with regards to power, money, communications technology and corporate (primarily U.S.) media. These "vast global leviathans" are contrasted with grassroots and community-based movements like the Slow Food campaign. Oliver Boyd-Barratt starts with the "leviathans" and, if the outline of globalisation in my second paragraph seems too embattled, he has the figures to prove otherwise.

The second part has the projects: the "grassroots upstarts". While all the projects are interesting in themselves, it is the candour and realism of the authors that put these chapters on to your must read list. The projects are all local (i.e. city-based or national) and at varying stages of development.

A must read chapter for anyone is Veran Matic's account of B 92, *Civil Networking in a Hostile Environment: Experiences in the Former Yugoslavia*, the "fascinating – and inspirational – story" of keeping independent media flowing to the people, despite continued and potentially lethal attempts (mostly from Milosevic's government)

to shut them down/up. They really made all available technologies, from the most basic to the most sophisticated, work for them and are still working towards rebuilding communities in the Balkans.

A Polder Model in Cyberspace: Amsterdam Public Digital Culture, by Geert Lovink and Patrice Riemens, traces the life of the Digital City (DDS), an Amsterdam-based free community network, from its inception in 1994 until it became a limited company in 2000. The strength of this chapter seems to lie in hindsight, perhaps driving the authors' unusually honest appraisal. It's particularly exciting as the account of the Digital City follows the path of Net culture through the 1990s.

Among other projects discussed are telecenters and microbanking for Mexican migrants and their families (Scott S. Robinson) and the relationship between grassroots uprisings and community networks in Argentina (Susana Finquelievich). Much of this book is far from cosy!

The third part of the book, *Building a New Public Sphere in Cyberspace*, aims to build on the previous parts with a view to looking towards the future. Highlights include Nancy Kranich's timely account, *Libraries: The Information Commons of Civil Society*. These frequently undervalued civic resources are embracing online media, whilst facing renewed onslaughts from modern copyright and continued uncertainty over funding.

This really is a valuable resource and I hope that the authors are rested and working on the next one in the series.

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The Human Factor: Revolutionizing the Way People Live with Technology
Kim J. Vicente
Routledge (NY), 2004
0-415-97064-4 \$27.95 (UK equivalent ~£16)

The book under review is a collection of the thoughts of Kim Vicente on the use of technology in everyday life by Kim Vicente, which challenge our philosophical beliefs on ICTs (Information Communication Technologies). He suggests that our understanding of ICTs, or indeed any established technology, centres on a "human-technology gap". For instance,

September 11th terrorists planned their attack to achieve their own political agenda through tailoring existing complex technologies to meet their destructive purpose. Through these formative examples, he makes a convincing argument as to how technologies can be harmful when humans use them in an inappropriate way.

In addressing how we can best understand technology-in-use, Vicente argues that traditional disciplinary boundaries create a division between the human and technical sciences, so neither the humanistic nor the mechanical views can clearly see the relationship between people and technology. He coins the term "human-tech" to help explain this, arguing that this concept requires that we develop a good understanding of the principles that govern human behaviour on a number of levels: political, organisational, team, psychological and physical, and to design systems accordingly.

The topmost level in the concept of human-tech is the political. Vicente assumed that there are basic considerations, such as public opinion, social values in each community and cultural norms that must be respected. For instance, in the Prohibition era of the 1920s and 1930s in the US, a law that prohibited the sale or consumption of alcohol was passed in an individualistic culture that valued freedom and had always accepted drinking as a social activity. Needless to say, this was politically impossible because there was a fundamental mismatch between the human needs and the political agenda. At the next organisational level, he takes the Challenger Disaster to show a technical system will not succeed unless sufficient attention is paid to organisational issues, such as how decisions are made in the face of outside pressures.

The book also discusses the meaning and mechanism of collaborative patterns in a broader context. While this book refers to many technological catastrophes such as the Chernobyl Disaster, or the Challenger Disaster, it does not dismiss aspects of everyday technology. Rather it focuses on the impact of organisational culture, political agendas and collaborative contexts on the application of technologies, emphasising that technology designers must make more effort not



only to focus on physical and psychological aspects of human-beings but also to understand social needs, organisational wants and collaborative context. An important strength of this book is to draw an insightful understanding of the political, organisational and cultural impacts of new information and communications technologies. In effect, Vicente implicitly asks the reader to join him in thinking about how technologies are interrelated with everyday life, integrating information, communication and society.

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The Design Experience: The Role of Design and Designers in the Twenty-First Century
Mike Press and Rachel Cooper
Ashgate Publishing, 2003
0-566-07891-0, \$59.95

This book is aimed at students. This means it is very accessible and well researched. It has a much wider constituency, however, and offers a practical and comprehensive overview of design. The book's two authors are Professors of Design Research at Sheffield Hallam and Design Management at Salford respectively. Their approach is unsurprisingly non-nonsense and grounded in professional practice.

The first chapter explores the cultural context of design and touches on sociology and economics. Culture is defined as "the lens through which people view products" (p 012). The authors position consumption within a (Western) "cultural economy" that is underpinned by a shift from "basic material provision" to the consumption of "status value and symbolic meaning" (p 016). They argue that consuming is actualising and "the creativity of people...has led some writers to present [it] as a liberating force." (p 030). This requires research to understand lifestyle and turns designers into "cultural intermediaries" (p 032).

Design has been a "Cinderella subject" (p 035) that "has been paid relatively little attention to by management theorists" (p 053). Despite this, design is presented as a strategic business activity. Chapter two argues that "design is about value creation" (p 064). Value is considered in terms of "price and non-price" (p 039) functions, and touches on everything from

brand and communication to innovation. Examples are given from manufacturing, services and retail. These show design adding value through increasing price, quality and satisfaction and by reducing manufacturing and after-sales costs.

Value is not just about making money, however. The authors note "the designer is not just the creator of objects but is an enabler of experiences" (p 069). Experiences go beyond function and use and benefit customers "physically, emotionally, intellectually and culturally" (p 073). They use Darrel Rhea's "Design Experience Model" to illustrate "the entire cycle of experience from when customers are first aware of the product to...disengagement".

Because designers touch on all facets of this lifecycle they "enrich the fundamental human experience of being alive" (p 079). They achieve this by "developing, optimising and metamising" new products driven by socio-political, technological and market changes. Examples are given including designing for changing populations (e.g. ageing) and new technologies (e.g. smart materials).

Chapter four is entitled "Research for Design". This chapter cites researchers known in HCI (e.g. Kälviäinen) and combines academic research with commercial practice. The authors note how "Sony focused...on analysing behaviour and cultural change" (p 112) and parallels can be drawn in moves from quantitative to qualitative research and participatory methods. Many of these (e.g. Contextual Inquiry) are commonplace in HCI although the focus of research is expanded to creative idea generation and exploring trends. The aim is to search for "understanding, ideas and solutions" (p 102).

The penultimate chapter looks at communication on the basis that designers have to understand users and collaborate with other specialists. This is perhaps the most traditional chapter and quotes Manzini. "The existing skill designers have, is to make the intangible, tangible, to conceive of an idea for a product...and to use visual techniques to share that idea with others" (p 136). The techniques include drawing, computer-aided design and moodboards, etc. The chapter ends with a survey of current trends in design and the last

chapter is given over to case studies in professional contexts. In combining industry practices with a comprehensive overview of design methods this is an excellent introduction to design for students, teachers and practitioners.

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Call for Papers

Workshop on Ambient Intelligence and Life

July 21–22, 2005
San Sebastián, Spain

paper submission deadline
March 15, 2005
<http://www.ehu.es/ami-life/>

Call for Papers

Acivs 2005 Advanced Concepts for Intelligent Vision Systems

Sept 20–23, 2005
University of Antwerp, Belgium

Full paper submission
April 10, 2005
<http://acivs.org/acivs2005/>

Call for Papers

Computer Supported Cooperative Work Special Issue: CSCW and Dependable Healthcare Systems

Submissions deadline
June 1, 2005
Further information from
rnp@inf.ed.ac.uk
m.rouncefield@lancaster.ac.uk

Call for Papers

2005 IEEE/WIC/ACM International Conference on Web Intelligence (WI'05)

Sept 19–22, 2005
Compiègne University of Technology, France

Submission deadline
April 3, 2005
http://www.hds.utc.fr/WI05/call_paper/



Profile

Russell Beale talks to Alan Dix



I lead the Advanced Interaction Group in the School of Computer Science at the University of Birmingham, a loosely coupled cluster of people interested in HCI and related issues. My research focus is on using intelligence to support user interaction. This takes two forms – the use of artificial intelligence techniques in interactive systems, and better design based on analysing and modelling the user and their interactions with the system. Coupling a.i. with a clearer understanding of the user

and their skills and limitations allows us to design more effective systems. I've been at Birmingham, on and off, since 1991, but as much off as on. My absences have seen me doing oceanographic research on board a ship in the South Pacific for months at a time, lecturing and researching in New Zealand, recording material for the radio in outback Australia, and travelling in remote and interesting regions.

One of the goals of HCI researchers should be to make a difference, and I've coupled this desire with my entrepreneurial approach and founded or co-founded four companies. The most interesting of these was aQtive: venture capital funded, it produced intelligent internet software, and I ran it for a couple of years, having fun with my co-founders (who included Alan Dix), before it was dragged down in the dot com bust. Phoenix-like, vFridge was born and taken on by Alan, whilst I went to work for LetsBuyIt.com (then the largest pan-European internet retailer) as Creative Technical Director. In a year we blew almost 1/4 billion euros, before it practically went bust, and I moved to a consultancy company in the city, doing internet stuff for mainly financial clients. But the call of research was too strong, and so I returned full time to academia in 2003.

What is your idea of happiness?

Throwing a racing boat around the course with a bunch of friends, racing hard to reach the beer tent first

What is your greatest fear?

Wasting time

With which historical figure do you most identify?

Ernest Shackleton; Capt. James Cook

Which living person do you most admire?

For different reasons – Richard Branson; Bob Geldof; Ranulph Fiennes; my parents

What is the trait you most deplore in yourself?

An ability to piss off my friends without meaning to

What is the trait you most deplore in others?

Apathy

What vehicles do you own?

Renault Clio 172 Sport; Porsche 911 (996 Carrera 2S); 1958 MGA Twin-Cam; Trek 970 mountain bike; X332 race boat; Laser 4000 dinghy; GP14 dinghy; walking books

What is your greatest extravagance?

See above. And Tina.

What makes you feel most depressed?

Feeling tired; failing to make a difference

What objects do you always carry with you?

Watch, wallet, mobile phone, bottle opener, enthusiasm. Sometimes I forget one or more of the first four.

What do you most dislike about your appearance?

Having cat hair on all my clothes

What is your most unappealing habit?

Picking my bellybutton fluff when bored

What is your favourite smell?

Tina, or woodsmoke

What is your favourite word?

Discombobulate. And "moose".

What is your favourite building?

The house of the manager of the Eagles in LA – modern, cool, and host to a great party.....

What is your favourite journey?

By car: Canning Stock Route, Australia; by boat: from the mouth of the Hamble river up to Bursledon

What or who is the greatest love of your life?

Sailing. Err-hmm, better make that Tina.

Which living person do you most despise?

No one person, but anyone who perpetrates inhuman acts and compounds this with a religious justification would fit

On what occasions do you lie?

When I'm tired of standing up and sitting down. Anyway, I like to think of it as putting an alternative spin on things.....

Which words or phrases do you over-use?

"Absolutely". "Excellent". "Yeah, I'll help with that....."

What is your greatest regret?

Not being taught to be musical

When and where were you happiest?

Travelling remote places; on expeditions; in a competitive sailing race; here and now; in a couple of months time.....

How do you relax?

Relax? Me?

What single thing would improve the quality of your life?

Broadband at home

Which talent would you most like to have?

To be musical

What would your motto be?

Anything is possible

What keeps you awake at night?

The cats

How would you like to die?

Instantly

How would you like to be remembered?

As someone worth being friends with

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