



Reflections on HCI '94 – A Student Perspective

Ben Anderson, Rachel Croft and David Fulton

The British Computer Society's ninth in its series of annual conference on human computer interaction (HCI '94) was held at Glasgow University, Scotland, in August of last year. These conferences are the primary meeting place for human-computer interaction researchers in Europe, although they also draw delegates from further afield, with this year's conference attracting participants from 21 countries worldwide. This conference report has dual aims: the first section gives a student view of some of the highlights of the conference, while the second reflects on more general issues relating to students' experience of this and other similar conferences – an experience which we think differs from that of more established members of the human-computer interaction community.

HCI '94 – A Student Review

The conference was opened by Ben Shneiderman (of the University of Maryland), with a vision for the future of direct manipulation based personal role managers. His boundless enthusiasm and well-oiled presentation skills lit up the talk, but his gesture of throwing keys from a broken keyboard into the audience to signify its death as the major input device was perhaps lost on a typically dour and reserved European audience, perhaps not used to such extravagant (and uniquely American) displays of enthusiasm! Other keynote presentations were given by William Newman (of Rank Xerox Research Centre's Cambridge Laboratory) and Michel Beaudouin-Lafon (of the Université de Paris-Sud). Newman's presentation compared the development of HCI methods with those originating in the engineering disciplines. His suggestion

of a 'whole-day' rather than task-oriented approach to task management was certainly an interesting one, and provoked debate. Beaudouin-Lafon, on the other hand, presented a critique of current CSCW technology, particularly cutting-edge areas like Virtual Reality conferencing. He argued that the current capabilities of such technologies were primitive, and that more progress could be made by augmenting reality rather than replacing it. His talk was critical of laboratory-based formal modelling and evaluation techniques, a core element of HCI research (and, indeed of many of the presentations at the conference), claiming that informal evaluation in the organisational environment had a lot more to offer. It is interesting that both Newman and Beaudouin-Lafon emphasised the need to consider the social environment, yet both are well respected computer scientists rather than social scientists.

The panel session on 'Usability in Practice' addressed the gulf between human-computer interaction in academia and the demands of usability work in industry. This session was a sobering experience for anyone who believes that human-computer interaction research has a significant impact on usability in practice. Practitioners talked of a minefield of organisational hurdles and of the difficulty of getting management to 'buy into' usability. As one practitioner put it, if you want to promote HCI issues within an organisation, talk to your managers about business benefits and cost benefit ratios but "if you're trying to get your managers to take HCI seriously, don't talk about HCI!"

No computing conference is complete without technical demonstrations of

future systems, and HCI'94 was no exception. There were a number of interesting 'hands on' sessions, particularly those provided by various visions of future telecommunications services for the 'Information Super-Highway'. In addition to the usual video telephone, there was a demonstration of the future of home shopping, which, for many delegates, raised the question of who exactly these systems were designed to benefit. Here we had a 2½ D 'VR' shopping mall through which 'home shoppers' would navigate ('walk') in order to find the goods they wanted. As they 'walk' through the mall, shoppers are confronted with the latest gimmicks and advertisements and, no doubt, service providers will soon be re-arranging the shopping mall at regular intervals to encourage users to explore, browse and, of course, to buy, conveniently placed commodities. Clearly, the evolution of computer technology into a selling medium raises interesting questions for human-computer interaction. After all, these systems are not maximised for usability (navigation of virtual worlds is fraught with problems) or efficiency ('finding' the jeans 'shop' may take some time), but simply for profitability. Will the human-computer interaction practitioners of the future be valued for their abilities to control and manipulate users (customers) towards the most profitable items, rather than their ability to design 'usable' systems?

Reflections on Student Issues

So what did we get out of HCI '94 and why might other students want to go to HCI '95 this year?

Well, to an extent what you get out of any conference depends on what you go there for and what you put into it. In

terms of what you go there for, the opportunity to interact with other researchers will probably come top of the list. Unless you are lucky enough to be part of a large group of like-minded researchers, conferences may be one of your few opportunities to meet other people who have similar interests. HCI '94 gave us the chance to share our work with other students and to pick the brains of more experienced researchers in the human-computer interaction community. The comparatively small size of the conference (around 200 delegates as compared with over 2000 at CHI) and the many social events helped here. Some of our most successful strategies for pinning down our favourite experts included 'trapping' them at their tables at mealtimes and cornering them with offers of free drinks at the bar. And since this was a conference with a Scottish flavour, other opportunities for human interaction included traditional Scottish dancing at a ceilidh (when a number of the delegates donned their kilts) and a reception on the shores of Loch Lomond in the Highlands.

Although the opportunity to socialize is one of the most valuable aspects of a conference, it can also leave some students feeling intimidated. New-comers to the field lack the ready-made network of acquaintances which comes with frequent attendance at these events. One solution is to work at the conference as a student volunteer. Student volunteers work for about 20 hours during the conference doing jobs such as manning the registration desk and monitoring doors at paper sessions. In return, their conference fees are waived. Participating in the conference in this way not only makes sense financially, but you also become part of a group of like-minded students who are well-placed to get to know other people at the conference.

Another, if more nerve-racking, way to participate in the conference is to submit and present a paper or poster. Conferences such as HCI '94 are committed to the presentation of innovative, leading-edge work so research by postgraduate students is important. While some students harbour the suspicion that they will do the work for a paper, only to see their supervisor go off to the conference to present it, this need not be the case.

In this respect, it was encouraging to see a number of UK and overseas PhD students presenting papers at the conference. In addition to the valuable opportunity to improve presentation skills, the act of presenting a paper and answering questions allows other people to identify you with your subject area, enabling them to approach you during the conference with follow-up questions. And if the thought of fielding questions about your work worries you, take heart in the fact that if there were serious flaws, your paper would not have been accepted in the first place. So if you have something to say, go out there and say it!

Finally, perhaps the most informative forum for presenting your work at the conference is the Doctoral Consortium. This is a 'closed' session, open only to invited students and a panel of 'experts' in the field. This year seven students from the UK and the USA presented their work at the consortium. The students were at varying stages of PhD research and they presented on a wide range of topics. The consortium aimed to give feedback which would guide students through the PhD process so students at an early stage of research were asked by the panel to justify their choice of topic and its potential relevance to the field of HCI, while those nearer to completion were asked to defend their thesis. For most students, this was a challenging but useful experience.

In Conclusion

As a review authored by, and largely for, students of human-computer interaction, this article has addressed two aims. It has given a 'student's eye view' of one of the major conferences of the year but has also articulated some of the issues raised by attendance as a student at this, or any other, academic conference. We have attempted to illustrate the interesting and thought provoking nature of the conference, particularly with respect to the uncertain future for students in the field of HCI. As Fuller notes (in this issue), it is today's students who are tomorrow's practitioners and it is by attending conferences such as HCI '94 that students can develop their identity within the field. As we have tried to show, the student experience of confer-

ences can be subtly different from those of established figures in the field but are, nonetheless, important. Conferences such as HCI '94 not only offer students the opportunity to 'gain contacts' and to 'pick brains', but also to influence the identity and evolution of the field by giving papers and posters, and by participating in consortia and panels. We hope that this article will prompt more students to take up these opportunities, and that they can gain as much from their experiences as we have done.

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HCI '95

HCI '95 will take place from 29th August to 1st September 1995 and will be hosted by the University of Huddersfield, Yorkshire, UK.

The Chair of the Doctoral Consortium will be Dr. Tom Rodden. The Student Volunteer contact is Paul Lucas.

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