

Social Issues Column. SigChi Bulletin. January 2002.
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Human-Computer Interaction is the noble face of Computer Science. It's the part that can bring hope to an increasingly push-button world that often seems frustrating and confusing to users.

Most of us who research and practise HCI probably do so because we want to make the world a better place. Sure, we are 'user-centred' in our practices but our outlook is much broader – we are community and society orientated.

Whenever I give a course on HCI, it's not the financial and productivity paradox justifications which excites students. They really see the point, though, of trying to ensure interfaces don't delay, annoy or even kill ordinary people like themselves. They are enthusiastic about "making a difference".

This new column looks at HCI from the broader social perspective. The aim is to motivate and encourage us to keep focussed on the positive vision of HCI: to make our users' lives, our communities and society better.

Some of us have the chance to make a clear social contribution in our work. A current grad student at CMU has a 3-week internship working with airline ticketing: she can help infuse HCI into an area that now is highlighted as part of the international war against terrorism. We don't want usability errors getting us arrested!

I work at the Digital Library Lab in Waikato University (www.nzdl.org), New Zealand, where the research is driven by a desire to empower end-users. Take just one of the projects where the team is working out how to develop a collection of conversational statements. The user cannot speak, gesture or communicate in anyway apart through a limited head movement. The interface design problems – what's the best-input device? How do you provide search term entry? - are fascinating and the wider social and ethical issues (like ensuring the user can choose and change what she can say) are challenging.

Since the terrorist actions of 11th September 2001, many have suggested that "personal technologies" – wearable radio-transmitting ID cards, biometric scanners and the like – be deployed to increase safety. The British Government is thinking of being the first to introduce a "citizen card" with built in-iris scan. The card will not just be used at airports but to access services like health and education.

These devices do offer potential gains to users. There might be smaller queues at security checkpoints because the checks can happen automatically via radio transmissions and users might feel safer carrying one.

However, in a world where much less complex interactive systems (like the videocassette recorder) cause problems, these wide-ranging systems might lead to serious user difficulties. If you fail to operate your VCR you simply miss a TV programme; if you can't work your ID card,

then you will be delayed, detained or even denied services. If such systems are developed let's hope skilled interaction designers are employed.

Most of us most of the time, though, will not be involved in systems with such an obviously social impact. Even so, the interactive designs we create and the way we create them can have far-reaching social implications.

Consider this design scenario. You are a mobile telephone interaction specialist. You notice users have to press many keys to access functions via hierarchical menus. Now, a few wasted seconds everyday for one user might not seem too significant, but taking a society viewpoint, if every phone owner in the world wastes a few moments, lifetimes of human potential are lost everyday. Your design halving the number of keystrokes is a powerful force for good. Milliseconds matter.

Now consider design methods. Good practice (and manners) when dividing a cake to share with a friend is to have one person cut the cake and the other choose. When you are designing an interactive system, similar social and ethical protocols might help. Harold Thimbleby, now Director of the UCL Interaction Design Centre, London, for instance has proposed "just design" – if a designer plans a system as if not knowing whether they will be its operator or user, better designs might ensue: I'll leave the full argument to his Interact'99 paper at <http://www.cs.mdx.ac.uk/harold/srf/Justice.pdf>.

"Changing the world, changing ourselves" is the CHI 02 conference theme. Over the coming issues, this column will explore what such hopeful slogans might mean. If you are interested in contributing, please send me an email: I'm always@acm.org. The next deadline is 5th of February, so send material while it's still fresh in your mind. When you hear news and you think: if only they knew some usability — drop me an email about what the idea is.