HCI and Freedom vs Protection in the Age of Networks

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ABSTRACT
There has always been a trade-off between freedom and protection in the design of interactive systems. At its crudest, this is a question of whether users are allowed the flexibility to do as they like with their tools, to break their nation's laws and make mistakes (and potentially learn from them), or whether we try to design out the potential for error, deviation and crime and, with it, perhaps, some potential for appropriation and creativity. More often, this choice is seen in terms of security and task efficiency: such as constraining input formats, and, sometimes, commercial imperatives, such as digital rights management to stop copying. As networks become ubiquitous and bring new social arrangements with them, this workshop asks: every time we protect people from the worst that can happen, are we sacrificing anything to do so? Whom are we protecting against what? How much play do we want in the system? And how are users working round restrictions and re-inventing the purpose of systems?

Categories and Subject Descriptors
J.O general

General Terms
Design, Human Factors, Security.

Keywords
Constraints, flexibility, security, privacy, openness, trade-off

1. INTRODUCTION
Much HCI has been involved in preventing users of digital technology from making mistakes, through skilled interface, interaction and/or system design. Clearly in some contexts it pays to be risk averse: medical design is an obvious contender, as is work on aircraft cockpits or nuclear power plants. But outside safety critical systems exist more ambiguous examples.

Although HCI is predicated upon sparing human beings the impact of our cognitive limits, there are different forms of flexibility that might be designed in…or out. As networks become more pervasive, engagement changes from individual encounters at the machine interface, to collective activities or activities with collections of devices. These altered relations with technology bring new challenges of the social and political kind that have a bearing on design decisions. Lessig [1] argues that code codifies values, yet that most people behave as if it were only a question of engineering. The advent of digital networks offers a new chance for coding in values and a different set of challenges, since a key feature is the interconnectedness of networked life. Thus it is timely to examine how to design constraints which enable rather than suppress human initiative for a networked context.

This workshop seeks to address an abstract quality of designing and one that cuts through domains. Benjamin Franklin said "Those who desire to give up freedom in order to gain security will not have, nor do they deserve, either one." How far is this true? Do we want to make the world safe? Or do we hold any other quality of life dearer, such as human rights, privacy or freedom of expression? What are the dimensions across which freedom and protection operate? Is it possible to have both? Are tangible objects in need of different treatment from the online world? Where do we find the happy medium between giving control, guiding through and making space for users to take the initiative? What 'workarounds' are we encouraging? And what factors should affect our decisions?

2. DOMAINS OF RELEVANCE
The organizers anticipate that the topic will cut across all domains of HCI work, from education and design for young people, to games, to productivity and enterprise, to arts and creativity tools to bathrooms of the future [2]. The one constant is that participants will be expected to address the context of networks and add to the body of thinking about the *social implications of networking every thing*. Although this will create a very diverse grouping, the focus of the day will be on the tension between these two qualities of interaction design (protecting and allowing) and all submissions should address this tension. Some work may

focus on design; other work will address how people use existing systems in actuality, but it is anticipated that everyone will have something to share about the value of both qualities in their work.

Please note, it is not the organizers' intention to advocate a particular approach or hold up freedom at the expense of safety or vice versa, but to offer a reflective discussion space to HCI researchers and practitioners to consider this often neglected feature of their work. If we are asked to act as gatekeepers, whom are we gatekeepers for? And do we have a personal disposition to bring to bear on these matters?

3. FURTHER FOOD FOR THOUGHT

There are many instances where openness in design has been exploited in unexpected ways. The success, for instance, of text messaging – where users have transformed the intended usage, reversing initial design decisions – reminds us that providing for the unknown may be key for user acceptance and usefulness. One might argue that a design that leaves a design space open for the user to explore and make their own is more likely to lead to solutions users want [3]. In networked contexts this phenomenon has been increasingly evident. In a recent talk by Evan Williams[1], founder of Twitter, he described how users invented features in the system such as @Replies that were only later supported by the designers. He showed how users turned Twitter into a tool for fund raising and how it became an effective news resource: during the plane crash in the Hudson River, Twitter provided images and witness accounts before any of the media. Another good example is the virtual environment of Second Life which was built for game designers to try out their ideas. Nobody planned for it to be colonized as an online world.

And we can look at the history of file-sharing sites such as Napster and Kazaa. Providing for indiscriminate p2p moving and copying of music, their defence was that users *could* use the service for legal purposes and if individuals infringed copyright then that was a private matter. The manufacturers of video recorders used this defence successfully, and it is the standard position of phone and internet providers that they are not responsible for what they carry, but it didn't work for the early music sharing sites and they were forced to change their offering.

Last, we can consider how constraints on a system can stifle creativity: imagine a colouring book where you physically could not draw outside the lines. Yet at the same time, these constraints can spark ingenuity through rebellion against being bound by others' idea of how something should be done. And we can see how openness causes its own problems, since lack of guidance introduces uncertainty. One might argue that we need to introduce rules merely so that they may be broken. Yet, if the nuclear power plant is one end of the spectrum, Gaver and team's investigations into ambiguous technology, such as furniture objects [4], are at the other. With little designed purpose and no task at hand, the user determines what to do with the tools and considerable imagination results.

On the whole, the simplicity, flexibility and openness of a system is one key to success, but so is a balanced implementation of rules, security, error prevention, user protection and ethics. Discussing a successful trade-off between these aspects is at the core of our workshop.

4. ORGANISATION OF THE DAY

The day has two invited presenters. Ian Brown of the Oxford Internet Institute opens the day with an overview of the topic and John Bowers of Goldsmiths College Design Studio presents some provocative thoughts after lunch. In 2004, Ian was voted as one of the 100 most influential people in the development of the Internet in the UK over the previous decade. John has augmented a career as an ethnographer and commentator on HCI and CSCW with a life as a musician and designer of instruments. Both are known as engagingly controversial.

The rest of the day will include short presented introductions to participants' work and, after lunch, a chance to pull out common issues and approaches. The day finishes with poster preparation to present back to the main conference and an innovative stance on the tension between freedom and protection will be sought for this artifact as well as other proceedings.

Participants are asked to submit some material ahead of the workshop for inclusion in a website and this may be the statement that they send in to express interest (see below). If this is the case, please prepare it for a general audience and do not include anything commercially sensitive.

5. EXPRESSION OF INTEREST

If you would like to attend this workshop, please send a two to four page position statement detailing your work and/or interest in networks and how the tension between freedom and protection plays out in it. We believe this issue cuts across academic and practitioner concerns and are happy to see it interpreted in a wide variety of ways, providing it addresses the central theme.

Please ensure that your submission arrives by May 1st in order to be considered for a place.

6. REFERENCES

[1] Lessig, L. 2006. Code: And Other Laws of Cyberspace, Version 2.0. Basic Books.

[2] Future Bathroom: http://www.fastuk.org/research/projview.php?id=1322

[3] Pipek,V., Rosson,M.B., Stevens, G. and Wulf, V. 2006. Supporting the Appropriation of ICT: End-User Development in Civil Societies. The Journal of Community Informatics.

[4] Gaver, W., Bowers, J., Boucher, A., Law, A., and Pennington, S. 2007. Electronic furniture for the Curious Home: Assessing ludic designs in the field. International Journal of Human-Computer Interaction, 22(1-2): 119-152.

1 http://www.ted.com/talks/evan_williams_on_listening_to_twitter_users.html