FUTURE INTERFACES

Psychnology Journal

TABLE OF CONTENTS

Editorial Preface

Psychnology is a very young journal, but is developing rapidly. Each successive number attracts broader interest, both in terms of the span of approaches contributed and the geographical origin of contributors and, presumably, readers. This is exactly how it should be. Psychnology is an electronic-only journal, which permits more rapid and flexible editorial approaches than are possible with traditional print-based publications. But Psychnology is also a serious journal, with peer reviews of articles, professional presentation, and full archival status. So, young and yet serious: much like the field the journal covers, the evolving relationship between people and ICT (information and communication technology). Each sides of this relationship impacts on the other. Technologies must be designed, or evolve, in ways that match the capabilities and limitations of the people who use them. On the other hand, technology changes people; in fact it could be argued that without ICT, understood in its widest sense, people wouldn't be people. While this has always been the case, the rapid pace of technological innovation makes the changes to people brought by technological advances vastly more salient than in earlier times.

The target topic for this issue of Psychnology, Future Interfaces, puts the focus firmly on the potential changes to everyday life that new ICT will bring to us. As the Call for Papers indicated, a clear trend is to design and develop technologies for specific purposes, needs and situations, such as mobility, group collaboration, disability, age, and so on. And of course another trend, as exemplified by this journal, is towards virtualisation; not only of information, but also of processes, organizations and activity patterns. The call produced a rich response in the form of a large set of submitted papers from around the world, on a diverse range of topics highly relevant to the theme of the issue. So much so that accepted papers had to be distributed over two issues; in issues three and four you will find a total of 10 papers on the special theme of Future Interfaces, and 3 papers of more general interest, from Finland, France, Germany, Italy, Japan, Spain, Sweden and the UK.

The first series of papers in response to the call open issue number three. Our own invited paper on the Exploratorium (*Waterworth et al.*) presents a way of linking the body, the mind and the emotions. A wearable device called the Body Joystick allows immersants to explore a multi-level virtual world using only breath and balance. By linking the emotional contents of the levels to the way of breathing of the immersant, we aim to provide a form of "psychofeedback" through embodied navigation.

Looking at more specific uses, *Fukuda and Bubb* present a study of eye tracking to compare young and more elderly users of an electronic timetable service. While both groups exhibited common difficulties arising from poor design, the elderly group were less flexible in their information gathering behaviour. The paper provides a usefully detailed description of the use of eye tracking as an evaluative technique.

The following paper by *Carmichael at al.,* on the VISTA project, deals with the important topic of accessibility of guidance to services available through digital television. As the authors point out, the expanding range of such services into areas such as e-banking, e-government and e-business provides many new opportunities, but often at a high cost in terms of complexity of use. The authors describe evaluations of an

on-screen, talking and listening avatar who provides an intermediary between users and services. The results indicate both the potential and the difficulty of providing flexible conversational interaction, and also draw attention to the need to take the characteristics of specific groups of users into account. What is clear is that such activity based design will be increasingly important in the future.

Moving to the World Wide Web *Garcia and Sicilia* suggest a more general ontology-based approach to supporting information seeking on the web. This permits more nuanced styles of querying for information than are currently provided by query-formulation interfaces based on word indexing. Essentially, the approach calls for the identification of shared semantic categories in the way groups of people make sense of information, and using this knowledge to design more meaningful interactions with sources of information. This is an important step towards the evolution of a more "intelligent" Semantic Web. *Menezes* examines the role of feedback when education is carried out "in virtuality", both in terms of discussion groups and on-line courses. She uses an ethnographic approach to identify strengths and, especially, weaknesses and suggests that, through extended experience and communication, feedback can lead to a viable community of learning – a "collective intelligence" built by all participants.

The two papers of more general interest in the current issue both concern highly topical research. *Retaux* suggests an account of the sense of presence, in this case within video games, based on activity rather than separation between the physical and the virtual. This is important work, which will hopefully lead to a more fruitful conception of the role and determinants of presence. *Castelnuovo* et al. expand work in the burgeoning field of VR for mental rehabilitation. They analyse the value added by VR over more conventional environments, and describe the V-STORE and its use in the treatment of patients with Dysexecutive Syndrome.

It has been a great pleasure for me to serve as Guest Editor of these two themed issues of Psychology journal. The collection of papers in this and the forthcoming issue provide clear and fascinating pointers towards Future Interfaces.

John Waterworth
Umeå, Sweden