Workshop Proposal: The Body in Design

Lian Loke
Faculty of Engineering and Information Technology
University of Technology, Sydney
PO Box 123, Broadway, NSW AUSTRALIA
Lian.Loke@uts.edu.au

Toni Robertson
Faculty of Engineering and Information Technology
University of Technology, Sydney
PO Box 123, Broadway, NSW AUSTRALIA
Toni.Robertson@uts.edu.au

INTRODUCTION
The body remains to some degree an elusive entity in our understandings of human cognition and our evolving relations with technology. With the advent of mobile and wearable sensor technologies, the body is brought to the fore as the essential and defining site of interaction and experience. Devices hosted by and around the body, or distributed in the environment, are able to read, measure, track and provide feedback on our location, proximity, gestures, movement patterns, pulse, breathing, emotional state, gaze and so on. What and how we carry or wear and how we move through space in our daily interactions have distinct influences on our experiences of the world around us and, of course, our agency to act in our everyday lives.

Digital technologies can now mediate our perceptions of our own physical and physiological processes. This mediation raises questions about our experience of our own bodies. What is the impact of these technologies on our sense of self and agency in these situations? How do they shape our (bodily) experience and what implications does this have for design?

Emergent areas of mobile, tangible, ubiquitous and wearable computing, in particular, draw attention to the role of the body in facilitating interactions. Physical gestures and manipulations of objects act as actions for input into computational systems or for mediated communication between people. Harnessing the physical and sensory abilities of the body and our capacity for learning through physical play has been applied in art, education, entertainment and rehabilitation.

In relation to design, there is a growing interest in actively working with the body in the design of interactive technologies (e.g., Svanæs, 1997; Schiphorst and Andersen, 2004; Klooster and Overbeeke, 2005; Djajadiningrat et al., 2007; Hummels et al., 2007; Jensen, 2007; Larssen et al., 2007; Antle et al., 2009; Loke and Robertson, 2010; Wilde, 2010). Design researchers are exploring the active engagement of the body and its capacity for sensing, feeling and intuiting in the process of design. This includes the experience of one’s own body as a source of knowledge, inspiration and judgement, and the exploiting of tacit knowledge embedded in embodied skills. The creative potential of the body is being harnessed for design exploration, idea generation, testing and evaluation of concepts, prototypes and working systems.

These approaches require designers to develop a bodily literacy, as well as more traditional competencies in digital, interactive, computational and material design. Sensitivity and skill in relation to the body, movement, and felt, kinaesthetic experience, and a language and vocabulary for shared understanding grounded in bodily concepts are areas ripe for development. Researchers are turning to other disciplines such as somatics, dance and performance in the search for methods and attentional strategies that prioritise direct experience and first-hand, first-person perspectives of movement and kinaesthesia (Larssen et al., 2007; Loke and Robertson, 2010; Schiphorst, 2011).

Embodied interaction has been proposed by Dourish (2001) as an approach to human-computer interaction which recognises the embodied, situated nature of human experience and being in the world (Robertson, 1996). A recent workshop at CHI2011 highlights the surge of interest in this area (Antle et al., 2011). How the body is theorised and conceptualised plays out in the design process and the resultant systems, products and user experience.

The workshop proposed here pulls focus onto the body itself and the role of embodiment in lived experience, with a view to informing design research and practice. It will be structured around the following workshop themes:

- Theoretical and philosophical perspectives on embodiment, the body and design
- The perception and performance of the body mediated by technology
- Design approaches, methods and tools for working with the body and bodily literacy
- The role of physicality and the felt sense in interaction and design
- Other disciplines as a source of knowledge about the body relevant for design

WORKSHOP AGENDA
This one-day workshop aims to bring together a diverse community of researchers and practitioners working on human-centred approaches to understanding the body in the design of interactive technologies.
The workshop is a full day, comprising two sessions. In the morning session, each participant will give a short presentation on their submission. Submissions will be circulated amongst the participants prior to the workshop.

In the afternoon session, there will be a mix of group discussion and demonstration of select methods for engaging the body and its senses in reflective and collaborative design activities.

CALL FOR PAPERS
Prospective participants must submit a 4-page position paper, addressing the themes of the workshop. The paper must be formatted using the two-column OZCHI proceedings template http://www.ozchi.org/cfp/cfp.html.

Submissions should be sent directly to the organisers (lian.loke@uts.edu.au). Note that participants must register for the conference.

Position papers will be selected on the basis of their relevance, quality and ability to stimulate discussion. The intended audience is both researchers and practitioners working with the topic. The expected number of participants is between 8-20 people.

IMPORTANT DATES
Deadline for submissions: 2nd September, 2011
Notification to authors: 7th October, 2011
Camera-ready copy: 21st October, 2011
Workshop: Monday 28th or Tuesday 29th November, 2011

WORKSHOP CONVENORS
Lian Loke, School of Software, Faculty of Engineering and Information Technology. Lian’s research is interdisciplinary and spans human-computer interaction, design and artistic practice, with the body as a central focus. Her research interests lie in understanding the lived experience of people interacting with emerging technologies and exploring how to design future products and systems from such understandings. Design methods and tools for speculative, user-centred and participatory design form a large part of her research programme. An ongoing strand of research is the development of methods for working with the creative potential of the moving body, drawn from movement improvisation, dance and somatic practices, which can be appropriated by designers.

Toni Robertson, School of Software, Faculty of Engineering and Information Technology. Toni has been working with foundational issues in HCI since the mid-nineties. Her research is among the earliest to articulate the importance of embodied understandings of human activities (including, for example, work and cognition) to interactive technology design. Her focus is on how such understandings can be developed and then used to design technology that is both useful and appropriate for its use. She is a specialist in the application of qualitative and participatory research and design methods and the use of phenomenological perspectives to understand and articulate our experience of technology use.

REFERENCES