
Foreword

Maurice Mulvenna*

TRAIL Living Lab, School of Computing and Mathematics,
Faculty of Computing and Engineering,
University of Ulster,
BT37 0QB, UK
E-mail: md.mulvenna@ulster.ac.uk
*Corresponding editor

Arlene Astell

School of Psychology,
University of St. Andrews,
Fife, Scotland, KY16 9JP, UK
E-mail: aj3@st-and.ac.uk

Huiru Zheng

Computer Science Research Institute,
Faculty of Computing and Engineering,
University of Ulster,
BT37 0QB, UK
E-mail: h.zheng@ulster.ac.uk

Terence Wright

School of Art and Design,
Faculty of Art, Design and the Built Environment,
University of Ulster,
BT15 1ED, UK
E-mail: t.wright@ulster.ac.uk

Biographical notes: Maurice Mulvenna is a Professor of Computer Science at the University of Ulster, Northern Ireland, at the TRAIL Laboratory. His research focuses on pervasive computing in the areas of health and social care that can be met by innovation and knowledge transfer activities.

Arlene Astell is a Senior Lecturer in Psychology at the University of St. Andrews, investigating creative applications of technology to support people to live and age as well as possible. She has been principal investigator on several grants to develop novel technology.

Huiru Zheng is a Lecturer in Computer Science at the University of Ulster. Her research area includes biomedical informatics, assistive technology, and intelligent data analysis. She is a grant holder on several research projects to support people with chronic diseases.

Terence Wright is a Professor of Visual Arts at the University of Ulster. He specialises in photography, digital media and interactive ethnography. He is the author of *The Photography Handbook*, 1999 (Routledge) and *Visual Impact: Culture and the Meaning of Images*, 2008 (Berg).

This special issue includes high quality papers, drawn from a call for papers to this special issue. Several papers were invited for this special issue after presentation at the First International Workshop on Reminiscence Systems, held on 5 September 2009 at HCI-2009 in Cambridge, UK.

The papers presented in this special issue reflect the research currently being undertaken around the world in reminiscence systems across academic and care-based disciplines. Reminiscing includes activities and the use of traditional prompts aimed at stimulating feelings and memories; e.g., the use of multi-sensory triggers to stimulate recall (Gibson, 2004). The majority of research in reminiscence systems has been carried out to assist people with dementia and related illnesses (Astell et al., 2008; Sarne-Fleischmann and Tractinsky, 2008). It has been shown that reminiscence in general, but especially life review, are potentially effective methods for the enhancement of psychological well-being in older adults (Bohlmeijer et al., 2007) and the therapeutic potential of place-based reminiscence has been proposed as an avenue in enhancing the quality of life for older people in long-term care facilities (Chaudhury, 2003), sometimes using remote reminiscing facilities (Kuwahara et al., 2006).

For this special issue, we define *reminiscence systems* as the use of technology to support reminiscence work. While this may include basic tools such as paper-based prompt cards, generally reminiscence systems technology is considered to encompass the use of information and communications technology (ICT). The use of ICT in reminiscence systems has evolved as computing technology has developed in sophistication and usability.

The paper 'Towards the therapeutic use of information and communication technology (ICT) in reminiscence work for people with dementia: a systematic review' by Ponnusamy Subramaniam and Bob Woods surveys research and development activities since 2000 in the field of reminiscence work for people with dementia, support by ICT. They find that such systems are used for two main purposes, to help maintain the identity of the person with dementia and to encourage communication with other people with dementia as well as carers. In their paper 'Remote assistance for people with dementia at home using reminiscence systems and a schedule prompter' Noriaki Kuwahara, Kiyoshi Yasuda, Nobuji Tetsutani and Kazunari Morimoto describe their work on a sophisticated ICT-based solution that encompasses remote conversation support, multimedia authoring of reminiscing material as well as a schedule prompter to reinforce prospective memory. In his paper 'Drawn from memory: reminiscing, narrative and the visual image', Terence Wright discusses the value of photographs as triggers for reminiscing using case studies from several research projects that demonstrate personal reminiscences as well as social memory. The paper 'Building digital life stories for memory support' by Basel Kikhia, Josef Hallberg, Johan E. Bengtsson, Stefan Sävenstedt and Kåre Synnes explores the use of life-logs to promote autonomy for people with mild dementia by helping to maintain episodic memories.

The paper 'Stimulating people with dementia to reminisce using personal and generic photographs' by Arlene J. Astell, Maggie P. Ellis, Norman Alm, Richard Dye,

and Gary Gowans reports on their research examining the use of personal and generic stimuli for prompting reminiscing by people with dementia. Their findings indicate that generic items can stimulate personally significant recollections effectively and offer practical benefits over personal stimuli including ease of sourcing items and their wide applicability.

Each paper received feedback from the workshop audience (where relevant) and reviewers as well as from the double-blind review process for this edition of the journal. The five papers offer fascinating, different yet, complementary perspectives on reminiscence and the systems that support reminiscence. As editors of this special issue, our thanks go to the eleven anonymous reviewers who contributed to this lengthy process, as well as to the authors who provided such interesting papers. We hope that you will enjoy reading these papers as much as we did.

References

- Astell, A.J., Alm, N., Gowans, G., Ellis, M.P., Dye, R. and Campbell, J. (2008) 'CIRCA: a communication prosthesis for dementia', Mihailidas, A., Normie, L., Kautz, H. and Boger, J. (Eds.): *Technology and Aging*, IOS Press.
- Bohlmeijer, E., Roemer, M., Cuijpers, P. and Smit, F. (2007) 'The effects of reminiscence on psychological well-being in older adults: a meta-analysis', *Aging and Mental Health*, Vol. 11, No. 3, pp.291–300.
- Chaudhury, H. (2003) 'Quality of life and place-therapy', *Journal of Housing for the Elderly*, Vol. 17, Nos. 1/2, pp.85–103.
- Gibson, F. (2004) *The Past in the Present: Using Reminiscence in Health and Social Care*, Health Professions Press, Baltimore.
- Kuwahara, N., Abe, S., Yasuda, K. and Kuwabara, K. (2006) 'Networked reminiscence therapy for individuals with dementia by using photo and video sharing', *Assets '06: Proceedings of the 8th International ACM SIGACCESS Conference on Computers and Accessibility*, pp.125–132, ACM Press, New York, NY, USA.
- Sarne-Fleischmann, V. and Tractinsky, N. (2008) 'Development and evaluation of a personalised multimedia system for reminiscence therapy in Alzheimer's patients', *International Journal of Social and Humanistic Computing*, Vol. 1, No. 1, pp.81–96.