Ageing and Technology

Preface to the Special Edition

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Abstract

This preface to the special edition provides an introduction highlighting the notion of a 'greying world' and reflects on the unique juxtaposition of ageing and technology. It then introduces the special guest editorial and provides a synopsis of each of the four featured articles. Lastly, it discusses future themed editions.

Keywords: Greying World – Ageing – Technology
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Introduction

In Australia, increases in life expectancies and a sustained decline in fertility have led to a ‘structural ageing’ of the population (Australian Bureau of Statistics (ABS) 2003). For instance, the percentage of the population aged 65 years and over was estimated to be 14.3% in 2010 (ABS 2008) and expected to rise to almost 25% by 2044-45 (Productivity Commission 2005). In the United Kingdom (UK) and the United States (US) the projections are very similar (Dunnell 2008; Federal Interagency Forum on Aging-Related Statistics 2004;) and some countries will see their elderly populations increase in excess of 30% by 2025 (Japan, Italy, Germany, Greece, Spain and Belgium: World Health Organization (WHO) 2002). The world is undoubtedly greying.

The expected increase in the size of the elderly population is coupled with a corresponding increase in life expectancy – not only will there be many more older people in the world, they will survive longer than ever before (Prentice 2008). Healthier lifestyles and improvements in health care – particularly over the last 50 years – are the major drivers of this large decline in mortality (ABS 2006). Given the increase in longevity, this means effectively that older adults today can expect to live a minimum of 15 – 23 years post-retirement. This extended life after retirement has important implications for all aspects of society, viz:

......a twenty-year-old man in 1900 could scarcely have looked ahead to retirement at all; today such a man can expect to spend nearly one quarter of his adult lifetime in retirement. These added retirement years have important consequences for income, social involvement, leisure, health, and indeed nearly all aspects of the process of ageing (Riley 1987: 4).

Technology has the potential to shape and change societies in general and ageing in particular. Technological advances such as mobile applications for preventative health care, assistive technologies for active ageing and independent living, social connectedness via online networks, through to biotechnological advances which aim to limit the effect of or even reverse ageing processes – all have the potential to change the very notion of what is meant by “ageing”. For example, my own area of research interest – older adults and their late-life romantic relationships, both online and offline – challenges two stereotypes at once. The first, that older adults are asexual and, secondly, that they are technologically incompetent (Malta 2008). Furthermore, the very idea that one could become a ‘mother’ post-menopause was unheard of prior to 2005. Medically-assisted reproduction has now developed to such an extent that late-life motherhood is now a distinct possibility for those who have the will (and the funds) to pursue it (Cutatas 2007).

iJETS Special Edition

This special edition of iJETS, simply entitled “Ageing and Technology” reflects the steadily growing research interest in all things ageing – its contents are as eclectic as the topic itself. The CFP attracted a range of articles from different countries around the world, reflecting both the importance of the topic and its universal appeal. In the end, articles were chosen for their unique focus and for their potential to add something new to the field of ageing research. This special edition thus boasts a special guest editorial and four articles from a diverse range of scholars from within Australia and overseas.

Beginning with the special guest editorial which provides an overview of technology and its impact on ageing, the four articles look at: (1) new technologies and their potential for linking
rural-dwelling older adults to their communities, (2) the use of exergaming amongst a population of older adult women, (3) the cognitive challenges faced by older adults in their use of websites and (4) the methodological issues inherent in surveys of older adults. Each of the articles employs different research methods and, as befitting a multi-disciplinary journal, the authors come from vastly different disciplines: the National Centre for Social Applications of Geographic Information Systems (GISCA) at the University of Adelaide; the School of Public Health at La Trobe University; the Centre for Research in Complex Systems at Charles Sturt University; and the Department of Communication at the University of Illinois.

Guest Editorial

This special guest editorial by Dr Joe Coughlin, the founder and Director of the Massachusetts Institute of Technology’s AgeLab Understanding the Janus Face of Technology and Ageing: Implications for Older Consumers, Business Innovation and Society examines the duality of technology’s impact on ageing – that is, it’s potential to deliver new and innovative solutions, whilst at the same time creating new issues and problems. Coughlin discusses seven such ‘dualities’ associated with the convergence of technology and global ageing, namely: functionality versus complexity, service versus stigma, universal design versus universally dull, safety versus privacy, health versus dignity, availability versus equity, and high-tech versus high-touch.

Featured Articles

The article New Technologies: Their Potential Role in Linking Rural Older People to Community by Feist, Parker, Howard and Hugo, reports on the first stage of the “Linking Rural Older People to Community through Technology” project. The paper focuses on older adults’ use of and attitudes towards new technologies, in an attempt to understand what services and connections older rural people consider to be part of ‘their community’. The results provide an understanding of how new technologies can be used to strengthen community connections, especially for those who are in danger of being socially isolated. The findings from this study should not in any sense be considered Australia-centric, as they can be directly applied to rural communities the world over.

With the second article Physical and Psychosocial Effects of Wii Video Game Use among Older Women by Wollersheim, Merkes, Shields, Liamputtong, Wallis, Reynolds and Koh, the edition moves from a rural environment to an inner-urban one. The use of exergaming as physical therapy or rehabilitation tool is fast becoming a hot topic, especially in individuals and groups with limited or extremely limited mobility or unique physical constraints. This paper examines the use of exergaming in a relatively healthy, community-dwelling group of older adult women attending a planned activity group (PAG). It illustrates that psychosocial benefits, such as social connectedness, can sometimes far outweigh any derived physical benefits from the use of such technology.

Websites for Seniors: Cognitive Accessibility by Burmeister is one of the few studies addressing the specific cognitive issues faced by older adults in their use of websites. This article challenges previous studies in this area by identifying how sudden adaptation to change may present unique difficulties for older adults. This paper not only illustrates the need to take such factors into account when designing websites for older adults, but also contributes to the literature by recommending which key adjustments should be made in the future.
Methodological Considerations in Surveys of Older Adults: Technology Matters by Quinn presents a succinct literature review regarding age-related physiological and psychological changes in health and cognition and, uniquely, relates these changes to older adult information and communication technology (ICT) adoption and their participation and response to surveys. In doing so, the paper presents data from a large telephone survey to illustrate and support its findings. Quinn highlights the need to allow for culturally-specific considerations, particularly privacy concerns related to online data, which distinguish older adult research populations from their younger counterparts.

Cover Shot

In keeping with the ageing theme, this special edition boasts a unique cover shot entitled “Interactive lines with colour” © 2010. The painting is by Australian artist ‘SRP’ (Sidney Reginald Powley), a 74-year old student studying for a Diploma of Visual Arts at Victoria University in Melbourne, Australia. Sidney’s story reflects that of many older adults in Western societies today – a passion for late-life learning. I thank him for his contribution.

Future Themed Editions

iJETS remains an interdisciplinary journal focused on the social aspects of new technologies. As highlighted in our last edition, in keeping with our focus on technology and society and interdisciplinarity, we’re moving towards publishing more themed issues. Future themed editions will focus on sustainability, new communications technologies, and learning technologies. Ideas for special themes are always most welcome.

As the guest editor for the current special edition, I hope you will find the range of articles presented both challenging and enjoyable.

Acknowledgements

My thanks go to the many authors from many different countries who answered the CFP to this special themed edition. The number of papers I received is testament to the interest in this topic and highlights the need for more such editions in the future.

My thanks also go to the many reviewers – again from across the globe – for the time and trouble they took in refereeing the articles in such a thorough manner. Your insightful comments were greatly appreciated by all the authors.
References


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