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Correspondence

ISG Internet discussion forum

The ISG Internet Discussion Forum invites global exchange of information about gerontechnology, a multidisciplinary field that addresses the interface between technology and older people. Comments and questions are welcome relating to ISG activities, research and development, user needs and acceptance, technology delivery, ethics, quality and standards, and more. Visit www.jdc.org.il/mailman/listinfo/isg_discussion. Subscription is free for ISG members and non-members. More readers are invited to sign up. Information and discussion on the ISG forum recently included the following topics: fall prevention from professional and personal viewpoints, call for discussions about ISG journal articles from authors and forum members, a request for information from one researcher; mention of 'infrastructure' in communities for response to technological monitoring systems (for instance, the vital mixture of technology and social factors).

Lauren E. Storck PhD, ISG forum moderator
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Falling in darkness (reaction)

In the preceding issue Platt[1] reported on his falling experience in an ego-document.

Based upon the experience of Israel's Supportive Neighbourhoods programme (including rural areas)[2,3], the fundamentally most important item of gerontechnology for homecare services is considered to be access to a 24-hr emergency call center, via a wrist-band or pendant-worn communication button. In the US these are known as personal emergency response systems (PERS)[4] and in Europe, as social (or community) alarms[5,6]. Depending upon the available infrastructure and basket of services, PERS or social alarms are provided at different levels of sophistication (for instance, they may incorporate various telemedicine features to remotely monitor and automatically respond to changes in vital signs).

The falling experience reported by Fletcher N. Platt is a poignant illustration of a worrying prevalent social issue[7] and further demonstrates the need for increased deployment and uptake of ageing-in-place support services such as those mentioned here.

References

1. Platt FN. Falling in darkness (Ego-document). Gerontechnology 2006;5(4):237
2. Billig M. Supportive Communities, an Optimum Arrangement for the Older Population? Journal of sociology and social welfare 2004;31(3):131-151
3. Normie L. Israel's elderly population: a general survey of health, independence, and technology. Gerontechnology 2002;1(3):190-197
4. Porter EJ. Wearing and using personal emergency response system buttons. Journal of Gerontological Nursing 2005;31(10):26-33
5. Fisk MJ. Social alarms to telecare: older people's services in transition. Bristol: Policy Press; 2003
6. Bradley DA, Williams G, Brownsell SJ, Levy S. Community alarms to telecare - The need for a systems strategy for integrated telehealth provision. Technology and Disability 2002;14(2):63-74
7. Stevens JA, Corso PS, Finkelstein EA, Miller TR. The costs of fatal and non-fatal falls among older adults. Injury Prevention 2006;12;290-295

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Book review

E. Aarts, J.L. Encarnação, editors. True Visions - The Emergence of Ambient Intelligence. 2006. 437 pages. Heidelberg: Springer. ISBN 10 3-540-28972-0 and 13 978-3-540-28972-2. Price € 128

If the future cannot be predicted, let us set out to design the future. This is the essence of this book, prepared from a group rallied by Philips Electronics and supported by the European Commission. Obviously, new technological options are well represented in the book, such as small actuators, foldable displays, electronic textiles, and extensive wireless computational infrastructure. Also, the new media field receives due attention. But, the vision itself is the real challenge; as the editors proclaim: a paradigm for user-centric computing until 2020.

The paper 'Ambient Culture' by Stefano Marzano, managing director of Philips Design, is the most challenging and cultural. Starting with the Ancient Greeks and Romans, lines are drawn toward our own future by analysing fundamental human drives at a deep level supposed to be constant, and the dynamics of continuous exteriorisation of human power toward ultimate freedom. In the past this freedom of the rich and powerful went easily at the cost of other people, such as slaves. Technological services are now viewed as filling the position of the earlier slaves. The

equivalent of the present average household technology is estimated at some 36 slaves or butlers or maids and rapidly on the rise. The new ambient intelligence has to honour sustainability of the earth as an important condition; moreover, it should sustain profitability in order to survive the hurricanes of the emerging global economy.

The notion 'ambient' refers to the context sensitivity of the new electronics, itself largely embedded and invisible with its sensors and actuators, except for the user interaction devices providing visual, auditory, tactile, and motor outputs and inputs. Many kinds of sensor and actuator are necessary to mediate between the environment including the human user itself and computational procedures, but these constitute only low level elements of the system. One obvious hurdle is what type of 'smartness' consumers value and what its dynamics would need to be. After all, the experience many of us have with so-called 'smartness' is not all that positive because basically users want to be in control and automaticity often proves to be a challenge to the user, as the self-commissioned 'smartness' or 'intelligence' of the system may not answer user intentions at all. In fact, often it costs the user time and effort if not straight annoyance, to undo undesired automatic actions of the system. As to terminology of information handling systems, the terms 'automatic', 'procedure' and 'robot' seem to me less pretentious and more adequate than 'smart' and 'intelligent'.

So we need more insight into what users would like to control and what they would like to leave to the system. Obviously, users have very diverse backgrounds and consequently will be very heterogeneous. So the system will have to analyse the wide range of competencies and desires of the user as essential and most important factors for the environment. This brings us to the subject of human drives. The book recognizes the importance of researchers in the field of physiology, psychology, social psychology, and sociology, knowledgeable about technology options, to penetrate into the many diverse worlds of the users. Both industrial design and industrial research are already shifting towards including these 'humanistic' disciplines. Innovative user-centered laboratories such as a HomeLab for learning to understand home experiences or a CareLab for understanding self-care and telecare are relative newcomers in the assets of electronic industries, although decades ago their forerunners were already there, such as in Philips Research, Bell Laboratories, and Xerox Parc. Of course, quite a few universities have a long history in this type of research, with an eye on improving rather than designing the future environment. Relevant chapters in this respect are Social user interfaces, Experience design and Experience research.

The book mentions but does not address demographic and age issues. However, there can be little doubt that the spectre of ambient intelligence will be a dynamic one since different generations of users will come to the new options with different types of expectation and experience. In fact, any technological transition will generate difficulties for the generations that will have to unlearn their established ways of coping and learn to master the skills required by the new environments. Basically this is the concept of 'technology generations'. Initially, the promise of an easier handling of the environment will rather be valid for young human generations as compared to older generations. Prospects for a better ambient intelligence will be thwarted or at least delayed for a great many adults including the majority of older people unless this problem will be recognized and adequately addressed.

The book presupposes a stable and rather prosperous world, without war, without essential hunger or thirst, without deep poverty, and with proper health and education, a world such as presently largely exists in industrial countries and is emerging in industrializing countries. It does not analyse how ambient intelligence might serve to spread such positive conditions to poorer continents and countries. Also, military applications are left out, although we know that the military with their huge budgets will be among the first to take their own advantage of new technologies including ambient intelligence. Of course, the book in no way pretends to handle problems of political and social struggle. Indirectly it takes the view that past struggles of humanity have not stood in the way of past technological advances so that present and future struggles will not stand in the way of present and future technology gain. Although out of the scope of the book, it is a great challenge to also map out options for ambient intelligence for helping to wipe out the above inequalities, thus contributing to the stable political ba-

sis that any realistic human design of the future needs. If the future cannot be predicted, perhaps we could include in our design efforts all basic elements needed for the 'true visions' to turn into global reality.

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People

Who is who: ISG board (2)

Roger Coleman, Member

Roger Coleman is Professor of Inclusive Design and Co-Director of the Helen Hamlyn Research Centre at the Royal College of Art, and an internationally renowned authority on the design effects of ageing populations. The HHRC builds on the DesignAge programme, which Coleman has directed since 1991. In 1994 he established a European network specialising in design and ageing, and in 1995 the RCA was awarded a Queen's Anniversary Prize for Higher and Further Education in recognition of his work. Roger Coleman was the recipient of a Ron Mace Universal Design Award in 2000, and a Sir Misha Black Award for Innovation in Design Education in 2001. His policy paper 'Living Longer: the new context for design' (Design Council 2001), which makes recommendations to government and industry on design responses to population ageing, is one of several key publications. He also advises major companies on the implementation of inclusive design at a strategic level. Trained in fine art, design history and philosophy at Edinburgh University and Edinburgh College of Art, Roger Coleman was closely involved in the establishment of the Greater London Council's Technology Networks in the 1980s and ran his own R&D consultancy, London Innovation. He has lectured extensively in the UK and overseas, and his writings on art, craft and design have been widely translated into other languages, including Japanese and Hebrew. Current research interests focus on the outcomes of the three-year i-design project, a collaboration with Cambridge University, Central St Martins College of Art and the Design Council, which is funded by the EPSRC (Engineering and Physical Science Research Council). He is also playing a major role in developing a new British Standard on Inclusive Design.

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Kazuo Yamaba, Member (2nd term)

Kazuo Yamaba PhD PE (1948) is full professor at the Department of Social and Information Sciences of Nihon Fukushi University, Aichi (Japan), and a member of the Japan Ergonomics Society of Certified Professional Ergonomists. In 1979 he graduated from Tokyo Denki University, and subsequently took his Doctor degree in Engineering at Chiba University with a thesis entitled 'Intelligent Mechanics and Machine system: Robot Vision'. His patents on color vision have been registered in the USA (US Patent 4776702, 4834541). Dr. Yamaba served as senior researcher at the Mechanical Engineering Laboratory of MITI, the former Japanese Ministry of International Trade and Industry (1990-1994, 1995-1996), and as visiting professor at Vanderbilt University, Nashville, USA (1994-1995). His current research focuses on robotics technology for welfare, color sensing systems, mechatronics in gerontechnology, and smart ageing.

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ISG Business

Pisa: scientific committee

The international scientific committee has started work for the 2008 ISG conference in Pisa. Its task consists of both advising the organisers as to relevant sessions and keynote speakers, and of peer-reviewing abstracts and full papers submitted. The ISG08 organisation is proud to announce the membership of the committee that is spread over all continents.

For Europe & Africa

Herman Bouma, the Netherlands
Don G. Bouwhuis, the Netherlands
Johanna E.M.H. van Bronswijk, the Netherlands
Carlo Caltagirone, Italy
M. Chiara Carrozza, Italy
Mauro Colombo, Italy
Jan Ekberg, Finland
Alain Franco, France
Silvestro Micera, Italy
Lawrence Normie, Israel
Richard Pieper, Germany
Hans-Werner Wahl, Germany
Patricia Wright, United Kingdom

For the Americas
Paolo Bonato, USA
Neil Charness, USA
Joseph Coughlin, USA
Geoff R. Fernie, Canada
James L. Fozard, USA
Ramon M. Gutmann, Argentine
Gari Lesnoff-Caravaglia, USA
Luiz R. Ramos, Brazil
Wendy Rogers, USA
[other members to be added]
For Asia & Australia
Elizabeth Karol, Australia
Mitsuo Nagamachi, Japan
Ken Sagawa, Japan
Toshiyo Tamura, Japan
Kazuo Yamaba, Japan
[other members to be added]
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Pisa: local organizing committee
Some changes occurred in the organizing committee that now has the following members:
Giuseppe Anerdi (Chair), E-Z Lab, Scuola Superiore Sant'Anna, Pisa
Roberta Annicchiarico, IRCCS S. Lucia, Roma
Fabrizio Astrua, Politecnico di Torino
Luca Beltrametti, Università di Genova
Ettore Bergamini, Università di Pisa
Dario Bracco, ISG Country Representative for Italy
Pasquale M. Calderale, Politecnico di Torino
Eugenio Guglielmelli, Università Campus Biomedico, Roma
Romano del Nord, Università di Firenze
Barbara Henry, Scuola Superiore Sant' Anna, Pisa
Patrizia Mecocci, Università di Perugia
Annalisa Morini, ITC-CNR, Roma
Arturo Natali, Università di Padova
Livio Quagliarella, Università di Bari
Guido Rodriguez, Università di Genova
Francesca Tosi, Politecnico di Milano
Giuseppe Turchetti, Scuola Superiore Sant'Anna, Pisa.
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World news

From South Africa
Being in Bloemfontein, South Africa, for almost eight weeks now, I'm struck by the limited use of technology in general, but especially in the townships. Looking at older workers, it seems as if with the increase of age, there is a decrease in the use of technology at the job. Also, AIDS has severely diminished the number of young parents, leaving grandparents, especially grandmothers, behind to take care of their grandchildren. A complete technology generation tends to be missing. Living of a pension and child support, with many mouths to feed, doesn't leave much time for the older adult to earn money for more advanced technologies than the mere necessities of nutrition and shelter. The picture is taken at Thaba Nchu village on October 5, 2006. This is a formal settlement, meaning that running water and electricity are available, though not much used because of their costs. The most common form of transportation for the young and the old is walking, and a heavy bag of porridge meal is carried on the head. Gerontechnology as a merge of technology and gerontology has a different meaning here. Assistive technologies for the oldest old are not much missed, since living within extended families has the advantage of 24-hour support by grandchildren. To keep older adults vital up to a high age requires first of all safe drinking water, waste removal, good shoes, and electricity to power home utensils.
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Calendar of Events

March 7-10, 2007
2007 NCOA-ASA Joint Conference: Let's rethink aging
Chicago, Illinois, USA
Organizer: American Society on Aging (ASA) and the National Council on Aging (NCOA)
Info: *www.agingconference.org/asav2/conf/jc/jc07/theme.cfm?submenu1=generalinfo*

April 2007
First East Africa policy-research dialogue on ageing
Venue not yet known
Organizer: AFRAN, a standing committee of the International Association of Gerontology and Geriatrics
Info: *www.ageing.ox.ac.uk/afran/conferences.htm*

April 17-21, 2007
Geographies of practice and the urban outdoors
San Francisco, California, USA
Organizer: Association of American Geographers
Info: *www.aag.org/annualmeetings/SF2007/index.cfm*

April 18-20, 2007
The International Educational and Networking Forum for eHealth, Telemedicine and Health ICT (Med @Tel)
Luxembourg, Luxembourg
Organizer: Luxexpo SA
Info: *www.medetel.lu/index.php*

May 13-15, 2007
American Telemedicine Association 2007 Annual Meeting
Nashville, Tennessee, USA
Organizer: American Telemedicine Association
Info: *www.americantelemed.org/abstracts2007/CallMain.asp*

May 14-15, 2007
2nd ISG Master class for PhD students in Gerontechnology
Eindhoven, the Netherlands
Organizer: Chair 'Public health engineering for built environments', Technische Universiteit Eindhoven
Info: *www.phe.tue.nl*

May 24-25, 2007
The 5th European Interactive TV Conference (EuroITV 2007): Interactive TV: a Shared Experience
Amsterdam, the Netherlands
Organizer: National Research Institute for Mathematics and Computer Science in the Netherlands
Info: *www.cwi.nl/events/2007/euroitv2007/*

June 16 - 19, 2007
Festival of international conferences on caregiving, disability, aging and technology (FICCDAT)
Toronto, Canada
Organizer: Smart Move Training and Development Inc, Toronto, Canada
Info: *www.ficcdat.ca*

June 18 - 20, 2007
7th International conference of IAHSA: The global ageing network: Leading change, sharing innovation, enhancing life
St. Julian's, Malta
Organizer: International Association for Homes and Services for the Ageing (IAHSA)
Info: *http://www.iahsa.net/malta/*

June 18-21, 2007
11th International conference on mobility and transport for elderly and disabled persons (TRANSED 2007/COMOTRED 2007): Benchmarking, evaluation and vision for the future
Montreal, Canada
Organizer: Canada Transport
Info: *www.tc.gc.ca/transed2007*

July 22-27, 2007
The 12th International Conference on Human-Computer Interaction
Beijing, China
Organizer: HCI International
Info: *www.hcii2007.org/home.html*

September 6-8, 2007
Realities of Ageing: Research into action
Sheffield Hallam University, Sheffield, United Kingdom
Organizer: British Society of Gerontology
Info: *www.bsg2007.org.uk/*

October 11-12, 2007
Housing and environmental conditions in post-communist countries
Gliwice, Poland
Organizer: The Silesian University of Technology
Info: *http://konferencje.polsl.pl/iaps/default.aspx*

Announcements of meetings and other events for the Gerontechnology Calendar should be submitted by email to: *j.e.m.h.v.bronswijk@gerontechnology.info*. The editors decide to include or not include the announcement of a certain event.

The most up-to-date forthcoming list may be found at *www.gerontechjournal.net*