Geragogy, the bridge between older people and gerontechnology D.G. Bracco, S. Bracco

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Prejudice. The modern Geriatry and Gerontechnology must not only treat Elderly pathologies and disabilities but rather take care of them making them protagonists and not victims of an old age constructed instead of suffered. For that purpose a continue and constant education and information are essential for all people over 65. This is the aim of Geragogy: the Psycho-Pedagogy Ageing. Action. Much more effective action is needed to ensure that Education Programmes really do reach the Elderly with the reviewed teaching programmes in order that they look tailored for Elderly as well as to stimulate their desire to learn. **Policy**. Increasing such opportunities should mean to rich positive economic effects and to increase individual and social fulfilment. So that the Elderly achieve the full dimension of being an active and thinking person. Conclusions. The Elderly today are more active, perceptive, observers and acute interlocutors. They need/demand new methods and new instruments which can make them feel better in their own houses and environment. Institutions (family, schools, nursing homes) professional profiles, demographic and welfare policies, town-planning, engineering etc. must be reorganised taking consideration Geragogy Gerontechnology as a bridge between elderly and their well being.

## PAPER SESSION 'UNIVERSAL DESIGN'; CHAIR: JAMES HARRISON (UNITED KINGDOM)

Considerations in universal design in terms of physical function characteristics of the aged

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Japan is the only country in the world with a population consisting of over 19% senior citizens aged 65 and above; currently becoming a Super-Aging Society. Over 40% of its total population aged 50 and above experience deterioration symptoms in their body functions. The influential and the upper level group are therefore center targets for the UD market approach. Some enterprises have already introduced the UD concept, developing immediate life equipment. Researches on usability and accessibility have progressed to some extent and is visible in some products but sometimes appear to be against the user's psychological demand. A number of cases resulted to destructing merchantability, thus the UD concept didn't always appear to be a complete success. It is generally believed that there's a 10-15 years difference between the physical and the intelli-To develop products for gence ages. people aged 65, there are basic objectives to be considered, but they have not been applied so far. Product development for this particular age group focuses on the sensitive methods and a well-balanced structure beneficial to the mental and physical considerations of the users. This study intends to clarify consideration in universal design in terms of physical functional characteristic of the aged.

## Inclusive design - Educating more than designers A.S. Macdonald

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Should design educationalists be teaching universal design to more than design undergraduates? One challenge facing design educationalists is how to introduce and deliver a coherent universal design curriculum based on the growing body of recommendations and increasingly available resources. This paper compares and discusses the relative successes of two different approaches, both developed by the author. In the first case, the main concern is to ensure that the young designer-engineers understand sufficiently the dynamic diversity of the human-model for whom they are designing, that their

process is sufficiently informed by adequate user research, and that ultimately their products embody appropriate features and details to reflect this. In the second case, the central issue is how to engender sufficient understanding in the future commissioners of design and societal policy makers of the value and efficacy of universal design for all aspects of built and virtual environments. This case is illustrated by the work from courses run in two successive years at a University in Kyoto and discusses the educational structure and philosophy employed.

Human centered design approaches for practicing universal design
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Universal design is practice of designing products that can be used by people with a wide range of abilities. Human centered design (HCD) is iterative design approach based on user requirements to develop products to be usable for users. To make a home appliance more usable for various users, HCD was applied for the development. In early stage of the development, user requirements were captured through interviews with various users including the elderly. Some perspectives about usability of the home appliance were extracted from captured requirements, then design parameters that would be relevant for those requirements were selected. To examine relation between overall usability

of the appliance and selected design parameters, a series of experiments was conducted. By employing statistical analyses to subjective data obtained from the experiments, structure of overall usability, and the relation between overall usability and the design parameters were clarified. Then design specifications of the appliance were determined. As just described, HCD approach can determine design specifications of products and also can clarify challenges that need to be solved in the future development to enhance usability and accessibility of products. HCD processes can be considered effective as a means for the practice of universal design.

213

## Universal design meets the modern journey A.S. Macdonald

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The Modern Journey, as a concept, as an experience, and as a metaphor, provides a useful way of evaluating the suitability of civic infrastructure, services and products for the increasingly diverse requirements of an ageing population choosing to travel by public transport. The technologies involved need not only to permit access and mobility in all the separate elements of the journey, but also to match customers' diverse requirements, and to provide a continuous, effective, safe and pleasurable experience. The challenge for designers will be to embed technologies

that recognize each individual's capabilities and needs profile as they make that journey. The author summarizes the findings of a three-month research study of the modern journey in Japan, supported by the Japan Foundation and the UK's Royal Academy of Engineering, and inspired by the Nordic Council's The Modern Journey. In this context, the value and efficacy of universal design is discussed in all aspects of built and virtual environments as is the way that we relate to technologies that understand, adapt to, assist and empower us in our separate and collective journeys.

Eras, generations and new technologies: a timeline tool for the inclusive designer

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Designers are faced with the choice of new technological developments. What tools does s/he have to understand the general acceptability by an ageing population of potentially ever more complex and potentially alien technologies and their associated protocols and interfaces? Developed as a research tool for determining 'generation effects', the 'generation' tool provides by way of a visual aide memoire to facilitate discourse between researchers and groups with diverse age spans within the population, and also to facilitate conjecture about the level of acceptability of new products and services by these different parties. Instead of a preoccupation with incorporating only the latest features and technologies into new products and services, the 'generation' tool provides for a means designer/researcher of profiling, in general terms, the level of technological acceptability and usability, in addition to the more pleasurable reference points of products and services. The paper describes the evolution and use of this tool as a research and development aid for the designer working with different age sectors in the population, and the findings arising from this research. Although the research undertaken discusses retrospective products, the paper proposes how the research tool can be used in the specification of future products and services.

Mature life style management: Bringing age related needs and factors as primary considerations into the world of product, environmental, communications and services design for 'the new old'

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Forecasting the changes that the future will demand from us in the field of product design, visual communication design, and services design in regard with the upcoming demographical changes, is one of the important issues that I always make sure to raise with my design students, as well as with our clients. In this presentation I will present and demonstrate the necessity of taking a good look into the new role that designers must play in the shaping of the coming future for the very simple reason that from now on, considering longevity and birth rate decline, there are going to be more old people than

young. Paradoxically most corporations, marketers and entrepreneurs are paying very little attention to 55+ woman and man. Seniors are almost invisible to the world of marketing and advertising which is dominated by people aged 25-45 that mainly target their own peer group and can not reflect from their life style, choices and usability patterns on the needs and interactions suitable for people of 55+ years. Life longevity brings with it the important role of designers to facilitate older adults in preserving their independent, active and vibrant life-style with suitable products and services.