

## Inscribing community by design: Reflecting on older people & participation

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### Overview & Main message

- How we conceptualise aging and the role that IT can play fundamentally matters
- Technology & older people
  - Case examples
- Reflective designers and builders of community IT
  - Societal importance



## Aging as a physiological decline process

### Physiological changes with aging



Vision



Hearing



Body/motor



Cognition



### Definition of Success Sent to me by my 78 yr old aunt



- At age 4 success is . . . not piddling in your pants.
- At age 12 success is . . . having friends.
- At age 17 success is . . . having a drivers licence.
- At age 35 success is . . . having money.
- At age 50 success is . . . having money.
- At age 70 success is . . . having a drivers licence.
- At age 75 success is . . . having friends.
- At age 80 success is . . . not piddling in your pants.

**Software specific to older people**

Eg Eldy software – over 220,000 users



<http://www.eldy.eu>



"Okay your father managed to get a mouse. Now how do we use it?"

**Hardware specific to older people**



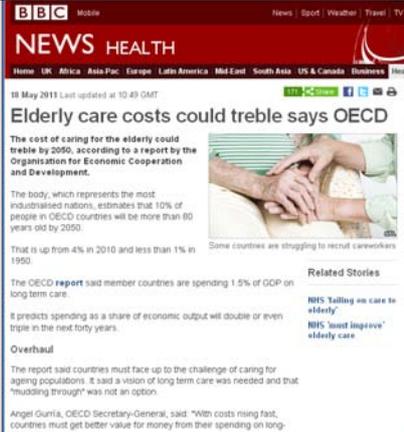
Eg Amlicom M5000 Mobile Phone

Eg OXO Good Grips

OECD Report May 2011

Ageing population

Challenge & costs of LTC



Article June 7 2011

Obesity

Challenge for

Selfcare, Health & well being



**Telecare, remote monitoring, AAL...**

Physiological monitoring  
Telecare systems  
(eg Docobo)



Safety/security monitoring  
Assistive Technologies  
(eg Tunstall)



"Aging in Place"

<http://www.antiotechnology.co.uk/images/holding.jpg>  
[http://ec.europa.eu/information\\_society/activities/etes/projects/project\\_of\\_the\\_month/200609\\_health\\_elifc/elifc1.jpg](http://ec.europa.eu/information_society/activities/etes/projects/project_of_the_month/200609_health_elifc/elifc1.jpg)  
<http://www.cumbria.gov.uk/adultsocialcare/services/tdccare.asp>

### Research projects



MIT House\_n



eHome Project - Vienna



CareNet Display Consolvo et al

### Limited evidence of outcomes

#### Health and other outcomes

- increase in life expectancy, better control over symptoms
- reduction in pain, anxiety and depression levels
- days off work can reduce by 50%

#### Healthcare system/cost outcomes

- visits to GPs can reduce by 40 to 69%
- hospital admissions can reduce by up to 50%
- number of days in hospital may decrease by up to 80%
- outpatient visits can reduce by 17 to 77%
- A&E visits can reduce significantly
- medication intake, e.g. steroids, reduced
- medicine utilisation is improved by 30%

<http://www.dh.gov.uk/en/Healthcare/Selfcare/index.htm>  
 Fitzpatrick et al. Supporting self care – a practical option: Diagnostic, monitoring and assistive tools, devices, technologies & equipment to support self care, April 2006.  
 Ayesha Dost, Research evidence on the effectiveness of self care support, Dec 2007.



### What outcomes for whom?

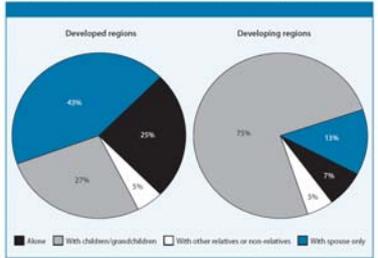
Highest category of logged calls

false alarms



### Reduced social contact at home

Living arrangements of older persons - in developed and developing regions



Source: United Nations (2008).  
 Note: Based on the population in households.  
 \* Aged 60 years or over.

Social isolation a significant problem & has health impacts

### How does this inscribe...



Aging... older people... home... care?

Aging as positive developmental process



Charity Harst  
 Name: Charity Harst  
 City: Brackhamton  
 Country: United Kingdom  
 Joined: April 2010

Thank you for taking time to look at and comment on my work. All proceeds from sales go to help my "family" of orphan children in Ghana and Nepal.

E-MAIL ADDRESS: [charityharst@gmail.com](mailto:charityharst@gmail.com)

WHY NOT VISIT MY BUBBLE SITE 'PEACEFUL HAVENY' [CLICK HERE](http://www.peacefulhaveny.com)

WANT LOVELY GIFTS CREATED FROM MY IMAGES ARE NOW AVAILABLE FROM MY SOCIAL STORES, CLICK THE FOLLOWING LINK TO VIEW [www.charityharst.com](http://www.charityharst.com)

UNITED KINGDOMS: CHECK THE PRICES ARE IN A HIRE! [www.charityharst.com](http://www.charityharst.com)

TO USE MY ARTWORKS AS A 'MAGINE ORIGINATOR' [CLICK HERE](http://www.charityharst.com)

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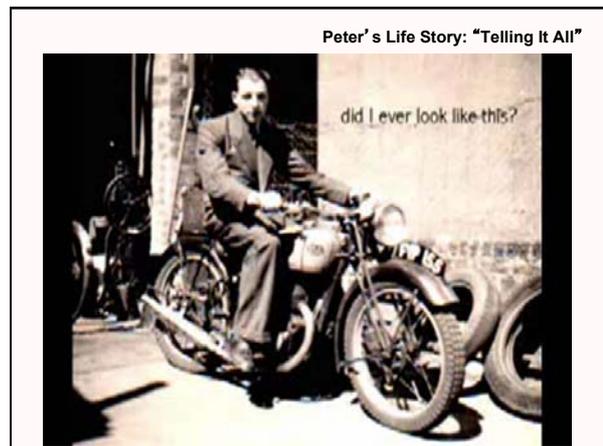
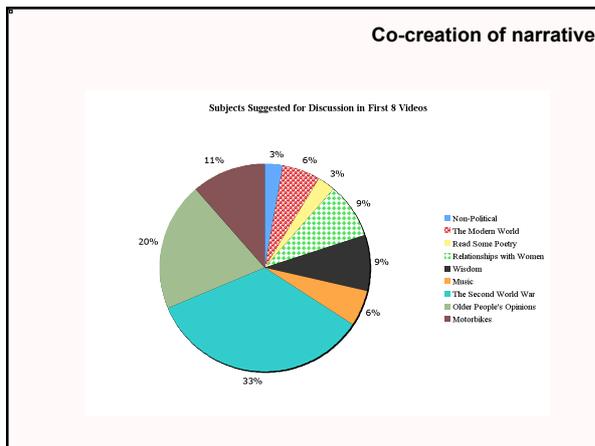
IF ANYONE NEEDS HELP CREATING LINKS ON FB, CLICK HERE: [www.charityharst.com](http://www.charityharst.com)

View All Art...

"Thank you...  
 All proceeds from sales go to help my "family" of orphan children in Ghana and Nepal."  
 [Dave Harley's PhD work]

Global community:  
 Peter 'Geriatric1927' on YouTube

Dave Harley's PhD work  
 - 4 yr study



- Example responses to Peter
- Overwhelmingly positive  
 "Wow, this video probably breaks all YouTube records of the highest density of pleasant comments ever [...] How respectful we all are! My faith in humanity is boosted" [Pp, 22, US - response to Video 1]
  - Personal identification and empathy with Peter  
 "omg...i cried...i feel like such a pansy...but i don't care...you are a very wonderful person...i will look forward to more of your videos" [Md, 19, US - response to Video 5]  
 "i wish you were my grandpa :)" [Jx, 21, US - response to Video 3]
  - Appreciation of his age & experience  
 "We need a voice on here that's "been around the block" a little" [Lt, 27, US - response to Video 4]
- "you are so refreshing and real, thanks for contributing to the you tube community, I would love to hear bits of your wisdom any tips on living life better or to its fullest" [Gg, 34, US - response to Video 1]



### Intergenerational connections



### Reciprocal learning

#### What Peter learns from his younger audience

#### Technical skills:

"Try putting music into the video through the program you are using, it would sound much better :)" [ZS., 19, US - response to Video 1]

"you can also change the colors on Windows Movie Maker. When you are typing your text down by where it says animation or what ever to change the display of your text it should be right there. Just click that and you can change the font and then color is right under the font" [Gt, 21, US - response to Video 2]

#### How to be a YouTuber:

"Put names of popular tubers in your tags, you'll get more views. It's kind of cheating I guess though..." [MC, 28, Canada - response to Video 2]



### Local Community: Wii league in Sheltered Housing



[with Dave Harley, Lesley Axelrod, Gareth White, Graham McAllister]

### Strong Evidence Base for Societal Impact

- Aging Is Satisfying, New Research Shows**  
 - 17 June 2008; Uni of Qld research - Psychology & Aging Journal  
 "Older adults appear to **see the good things in life more easily** and are less likely to be upset by the little things that go wrong." (Von Hippel)
- Getting Older Leads to Emotional Stability and Happiness, Study Shows**  
 - 28 Oct 2010 - Stanford Center on Longevity  
 "As people age, they're **more emotionally balanced and better able to solve highly emotional problems**, [and] can get along with a greater number of people. They **care more and are more compassionate about problems, and that may lead to a more stable world.**"  
 "This all suggests that as our society is aging, we will have a **greater resource**. If people become more even-keeled as they age, older societies could be wiser and kinder societies. (Carstensen)

### Strong Evidence Base for Health Impact

- Active Social Life May Delay Memory Loss Among US Elderly Population**  
 - (30 May 2008: Harvard School of Public Health; Science Daily)
- Less Frequent Social Activity Linked To More Rapid Loss Of Motor Function In Older Adults**  
 - A. S. Buchman et al. **Association Between Late-Life Social Activity and Motor Decline in Older Adults**. *Arch Intern Med.*, 2009;169(12):1139-1146
- Social Life and Mobility Are Keys to Quality of Life in Old Age**  
 - (30 May 2011 Science Daily)
- Higher Levels of Social Activity Decrease the Risk of Cognitive Decline**  
 - Bryan D. James et al. **Late-Life Social Activity and Cognitive Decline in Old Age**. *Journal of the International Neuropsychological Society*, 2011; 1
- Reciprocity: A predictor of mental health and continuity in elderly people's relationships? A Review.**  
 - Fyrand, L. *Current gerontology & geriatrics research*. 2010.

## In conclusion

### Summary Reflections So what does it all mean

- Reflects many themes from 'aging as developmental process' literature
- 'Technology for older people'
  - Not just (even?) about accessibility
- (Older) people want to do 'real things' with technology
  - can engage with new technologies
  - even when accessibility is an issue
    - \*IF\* they perceive value

Living in place, in community  
not aging in place

### Challenge to us as designers

Reflective practitioners  
Value centred designers



- How are we implicitly (or explicitly) inscribing notions of community, participation & age in our designs?
  - What other groups might we be excluding?
- What new opportunities arise to take a more inclusive participatory approach to community & technology?
- Societal importance
  - Health benefits
  - Huge untapped community resource, huge amount to contribute

### Opportunities

Enabling community engagement and intergenerational communication  
can be a good focus for design for ~~elder~~ people

- Older people no longer in full time work have
  - Time to contribute
  - Experience to contribute - sharing of wisdom
  - Motivation?
- Local community
  - Garden, shopping, language learning ...
  - Local history
- Beyond local geography
  - Communities of interest
  - Building relationships - 'internet grandad'

### Discussion

