

SPARC EPSRC funded research:  
'An investigation into older  
drivers advanced technology  
desires, needs and requirements.'

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# The Middlesex team

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# The 'others'

- Neville Stanton - Partner
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# Background

- People experience changes to themselves as they age
- Some ageing effects are beneficial in terms of driving safety, e.g. risk aversion
- Some ageing effects are detrimental to driving safety, e.g. reduction in visual acuity

# Research perspective

- Advanced technology in automobiles can help older people cope with less desirable ageing effects e.g. lane deviation warning
- Much new technology is not appealing to older people who do not usually wish to learn complex new user interfaces
- Some new automotive technologies and interfaces cannot be avoided by older people

# New interfaces...



# New interfaces...



# New Technologies...



# New Technologies...



# Research issues

- What do older driver's think of potential of upcoming technologies?
- What are their experiences of advanced technology interfaces in cars?
- Are their fundamental interface executions which will turn off older drivers – if so what are they?
- What can be done to design new technology interfaces to make them more appealing to older users?
- Will some interfaces always be difficult for older drivers?

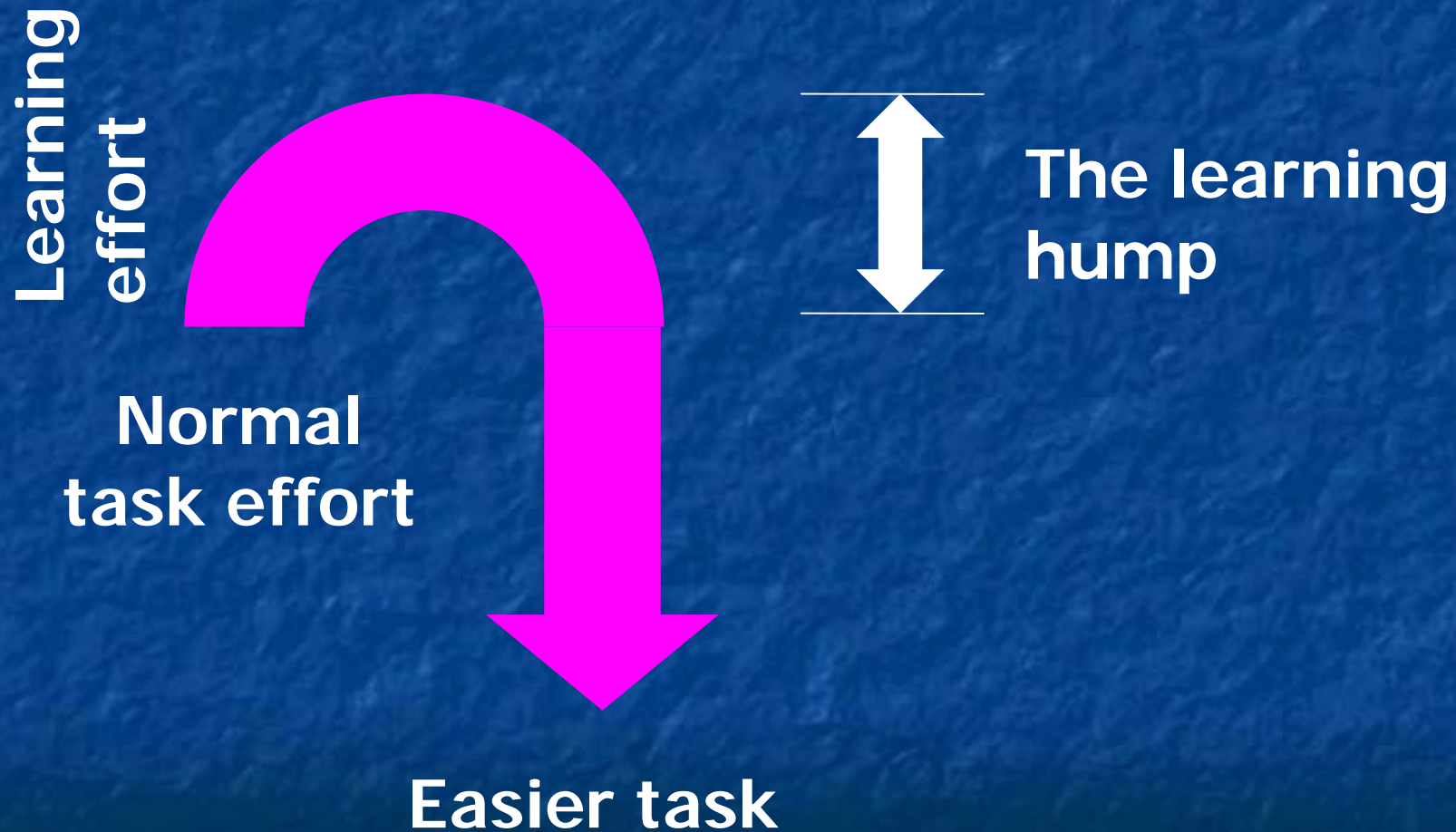
# Research Plan - 1

- Phase 1 Goals:
  - Develop an older user panel
  - Narrow down research technologies
  - Carry out focus group sessions with older people to identify their issues and research wants
  - Develop conceptual model

# Research Plan - 2

- Phases 2 & 3 Goals:
  - Develop older user-friendly concepts
  - User testing with older people
  - Development of design specifications for designing for older people
  - Final design specifications
  - Final workshop to showcase the lessons learned

# Learning new skills



# Can technology make Old Age a better experience?

- **Research:** Strong call for more age-related research
- **Ageism in industry:** Recognition that older people are a market ignored by industry. Existing technologies could give more help.

# Participative and Iterative

- Pro-active Steering Group
- Observations in context
- Focus group discussions
- Interactions with driving simulator
- Interactions with prototypes and simulations

# Output

- Empowered design process framework
  - **More stars in the RAE**
- Product innovation for CS and PD
  - **Improved requirements elicitation and evaluation with 'the third-agers' , 'baby-boomers', the 'cool' generation**
- Improved guidelines, design heuristics
  - **Researcher as facilitator of future investigation**

Thanks for listening!