# Change and continuity in walking and cycling through life course events and transitions; insights from life history interviews

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# **BACKGROUND**

# Physical activity:

- (life-long) physical activity beneficial
- Potential of routine walking and cycling





# **Knowledge limitations**

### Predominantly cross-sectional study

- Associations with contemporaneous factors
- Overlooks influence of previous experience
  - locations, attitudes and inter-personal relations

### Change over time

- Population level time series data
- Longitudinal studies short term time frames
  - Life events trigger behaviour change





### Research Aim

 To understand change and continuity in individual behaviour over the life course





# Life course perspective

"any point in the life span dynamically as the consequence of past experience and future expectation as well as the integration of individual motivation with external constraint"

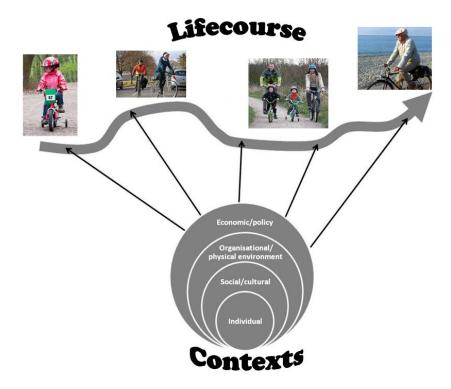
(Giele and Elder, 1998)





### **Principles and themes**

- Trajectories, turning points, transitions
- Linked lives
- Historical context







### Research objectives

- To understand change and continuity in individual behaviour over the life course
  - the development of behaviour through events and transitions
  - how outcomes relates to cumulative, earlier experiences
  - Impact of events within parent-child dyads
  - differences in trajectories between cohorts







# **RESEARCH DESIGN**

### Methodological challenges

No existing longitudinal data

Retrospective, biographical approach

- reconstruct through recollection and reasoning
- behaviour contextualised in relation to life events and transitions
- lagged changes, spurious linkage of event and behaviour change

Bonham and Wilson (2012) women's start stop cycling biographies

Bonham, J., Wilson, A., 2012. Women cycling through the life course: an Australian case study. In: Parkin, J. (Ed.), Cycling and Sustainability. Emerald, Lewes, UK, pp. 59–81.

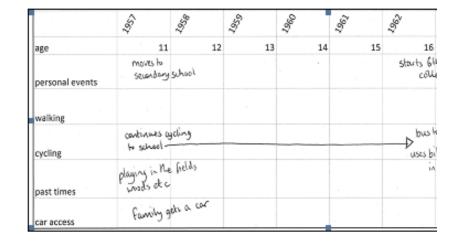


Society

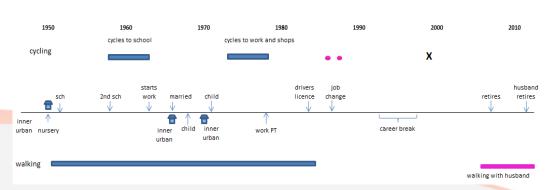


# **Biographical interviews**

- Two stage interview
  - 1st: life history calendar
  - 2nd: review personal timeline



 visual and interpretive biographies





# **Participants**

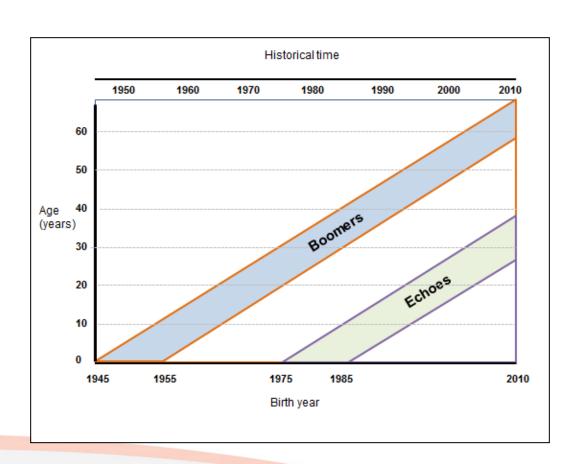
Two ten-year birth cohorts
C1 1945-1955
C2 1975 -1985

Distinct historical locations

Parent-offspring dyads

community groups

33 biographies





# **Analysis**

- Flexible data-led exercise, iterative, comparative
- Timing and circumstances of change
  - Focused on key periods
- Holistic form
  - Typology construction

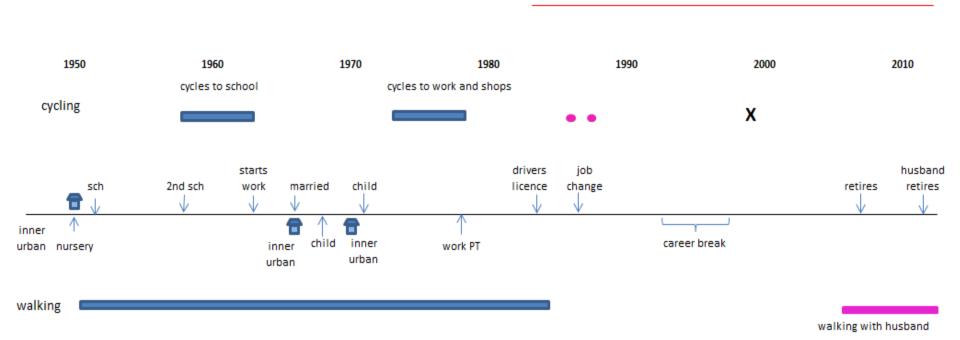
- Individual cases
- Dyad
  - Intergenerational impact of events
- Gender-Cohort groupings



# **BIOGRAPHIES**

### **Carmel**





# **FINDINGS**





# Behaviour change and life events

Ascribed to changes in **location**, **mobility resources**, **inter-personal roles and health** 

often multiple and interrelated events,

but, also,

behaviour frequently stable through events

# Centre Transport Society

### **Holistic form**

much behavioural stability with a few changes

#### **Transition to adulthood:**

New behavioural patterns established in the course of location, role and resource changes

#### **Mid-adulthood:**

Trajectories often stable, walking and cycling often precluded by roles and activity spaces

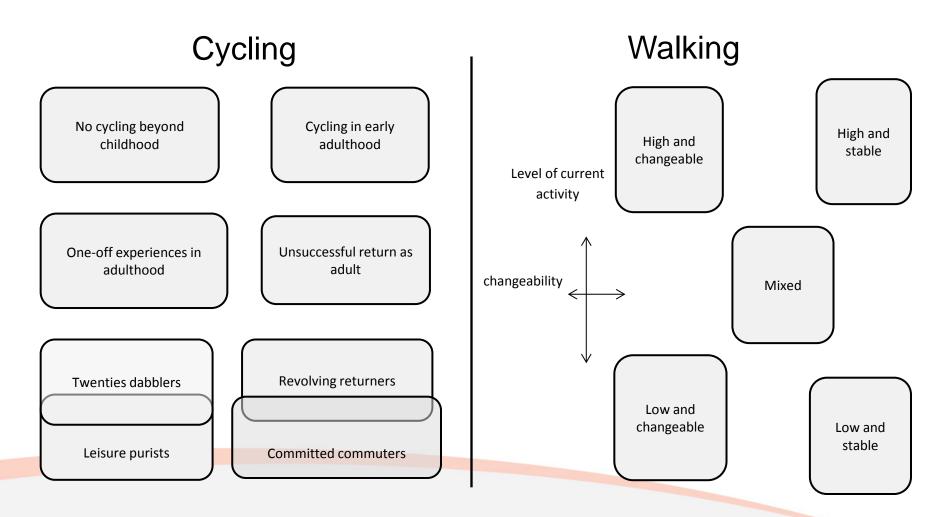
some changes ascribed to events

#### Later adulthood:

potential in the context of evolving family and employment commitments

### **Holistic form - typologies**





**Diminished – restorative – resilient** 

### **Comparative insights: Boomers vs Echoes**





# Early experiences

**Boomers:** 

**Echoes:** 

independent walking

escorted walking, greater car access within family

Lesser bike access but greater spatial freedom

Greater access, more restricted spatial boundaries.

cycling extension to mobility in youth

Gender differences

Males - specialist cycling

Females - interest waned





### Transition to adulthood



Boomers: Echoes:

Earlier role transitions prolonged transitions

Car access Car access

higher education, graduate employment

some recreational and transport cycling

some males recreational and transport cycling, females occasional recreational



### Mid and late adulthood

Diminishing changes: locational changes, injury

Mostly men

Restorative changes: locational changes, health events, role changes Mostly women

Adaptive changes: Electric-bikes, commute to recreational cycling

### **Events in linked lives**

- mothers' employment and children's educational changes
- Care needs and location changes for ageing (grand)parents





### Longer term influence of trajectories



restorative cycling trajectories - engagement in youth and early adulthood

Failed returns

Walking trajectories - car access

# **DISCUSSION**





### Life course framework

#### Changes in macro context

economic

mobility

resources

transportation factors & spatial planning

cultural values & norms health /environment/ risk

family structures

relative stability

Transition to adulthood

gendered life course

Work – retirement transition

latest walking/cycling

Changes in micro context

locational decisions

interpersonal relationships & roles

health

**Time** 

bettertogether



### Longer term mechanisms

Role socialisation, Stress adaptation, Capital accumulation Schwanen et al (2012): travel behaviour habits "embodied intelligence"

Earlier experiences: generative and enabling of restorative change?

Boomer women better positioned?

- Later automobility
- Employment shaped by motherhood
  - disruption and limitations to mobility

Changes in these factors for females in younger cohort

Schwanen, T., Banister, D., Anable, J., 2012. Rethinking habits and their role in behaviour change: The case of lowcarbon mobility. Journal of Transport Geography 24, 522-532.



### Contribution of a life course perspective

- Life-long opportunity structure
- Timing
- Historical context
- Inter-generational aspects

# Implications for policy



- Value of early experiences, even if brief
- Later life potential for restorative, adaptive and diminishing change
- sensitive periods
  - Emerging adulthood: promote multi-modality
  - Later life occasions for intervention e.g. Downsizing moves
- gender/cohort dimensions in readiness for restorative change

# Next steps...



How does the built environment shape the experience, ability and willingness to cycle through middle and later life?



