

Using geographical data in longitudinal studies: Value, challenges & examples

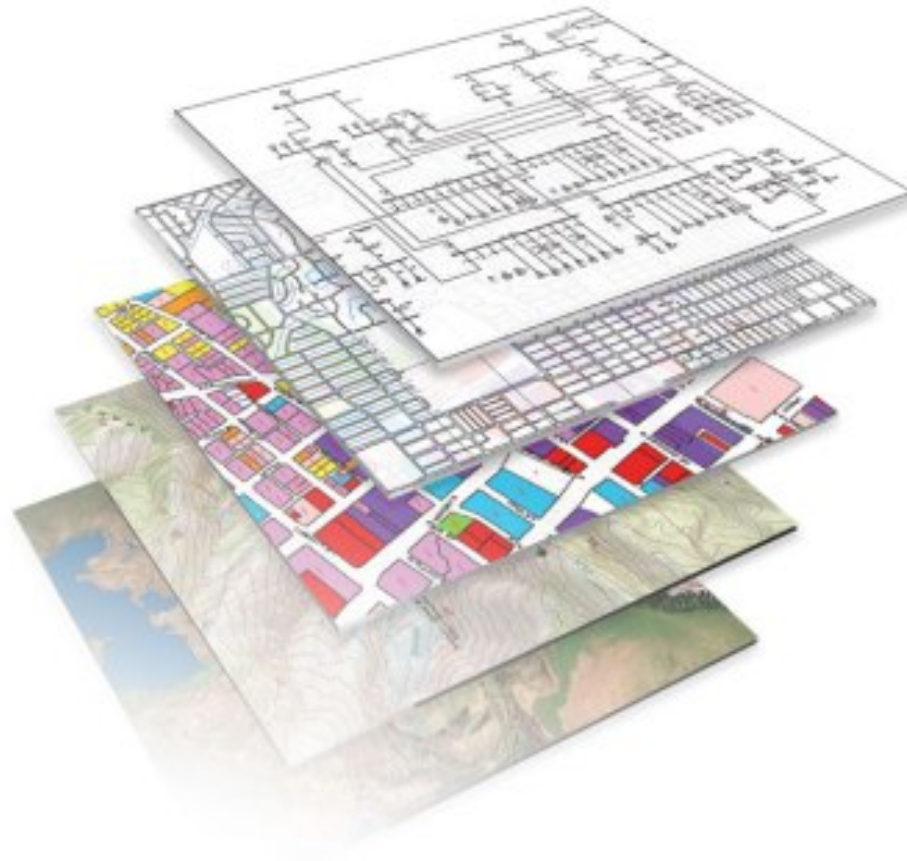
Prof Chris Dibben

University of Edinburgh and closer WP6

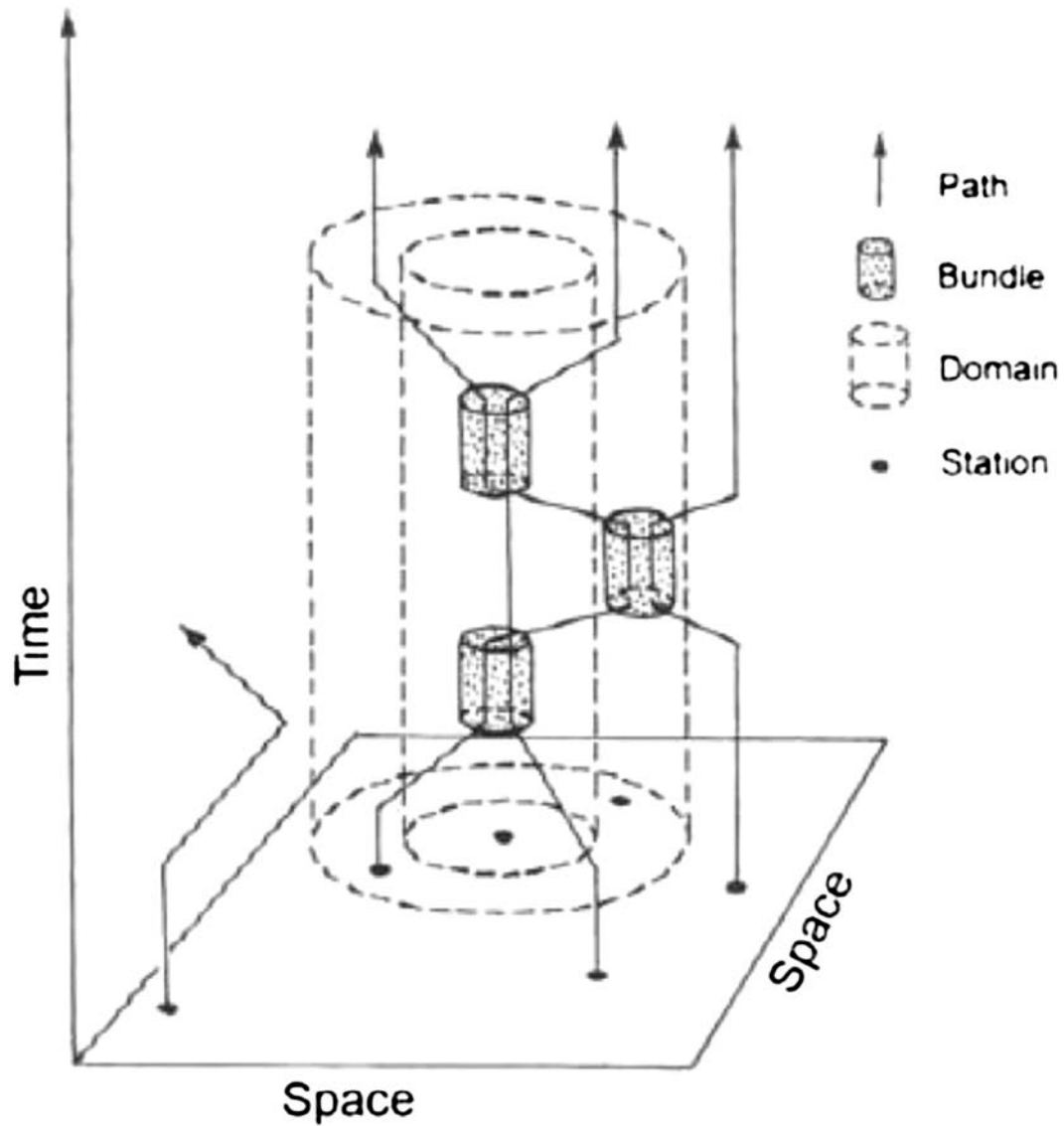
Overview

- discuss the value of geographical data in cohort studies,
- give an overview of the types of data that can be linked to each study and each time period,
- discuss the challenges of analysing place effects in life course studies using research examples from different disciplines

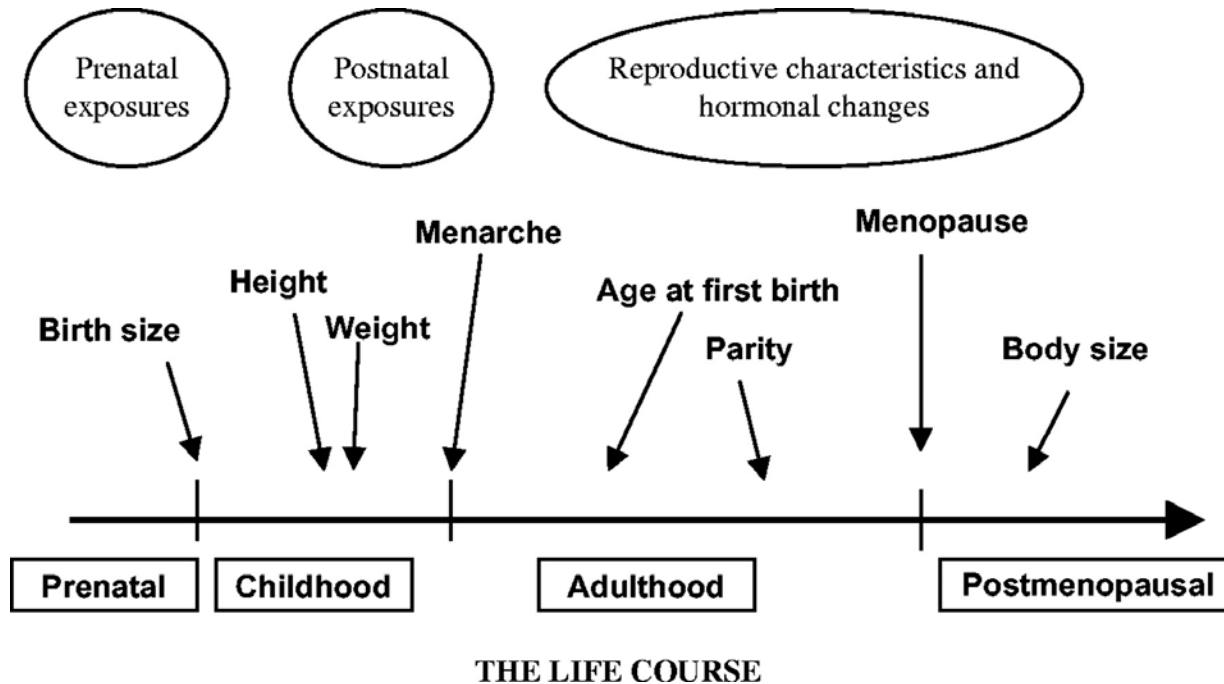
Spatial information



Source:<http://www.oxfordcounty.ca/Services-for-You/Mapping/data-requests>



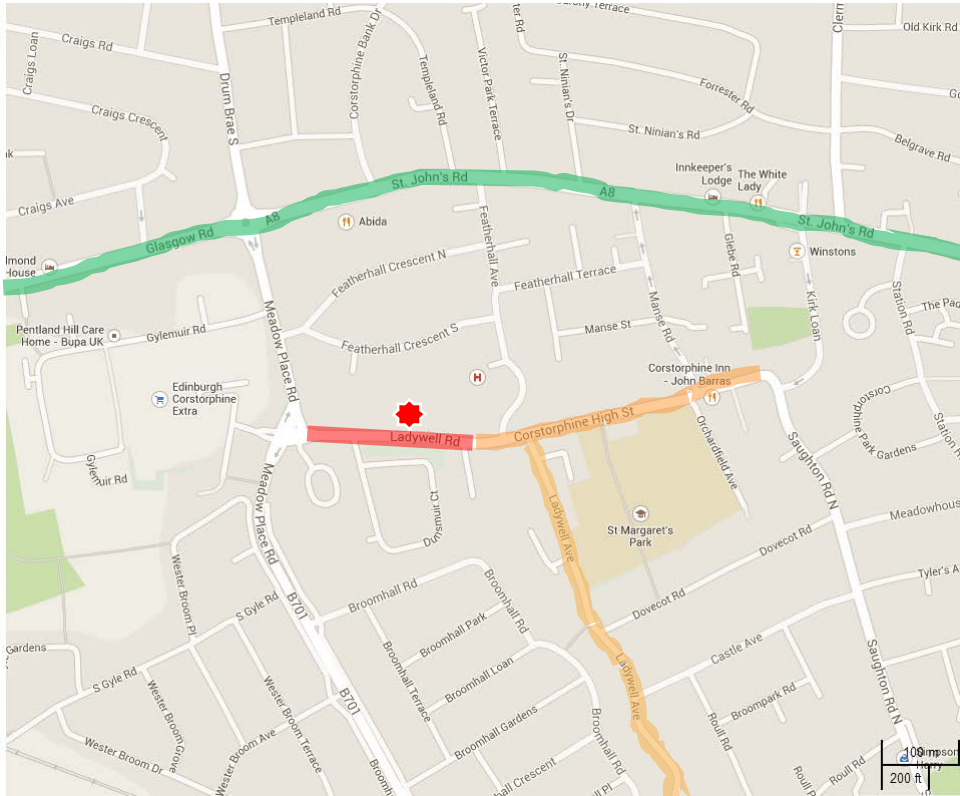
A simplistic time-line representation of conceptual (ovals) and observable risk factors for breast cancer.



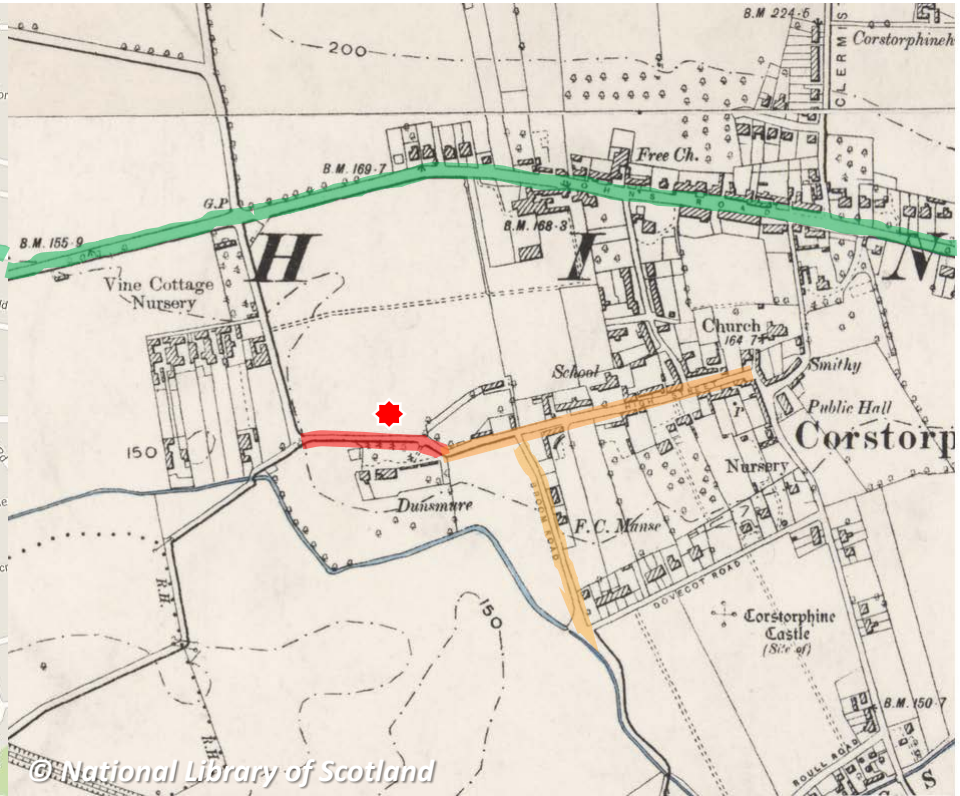
Bianca L. De Stavola et al. Am. J. Epidemiol. 2006;163:84-96

Example: Ladywell House, Ladywell Road, Edinburgh, EH12 7T

Google map - 2014



Ordnance Survey six-inch to the mile - 1892-1905



- | | | | |
|---|-----------------------------|--|--------------------|
|  | St John's Rd |  | JOHN'S ROAD |
|  | Ladywell Ave |  | BROOM ROAD |
|  | Corstorphine High St |  | HIGH STREET |
|  | Ladywell Rd |  | ??? |
|  | Ladywell House |  | ??? |



Programme

10:30 **Session 1: Geographical data and its value in cohort studies**

10.30-10.40 **Introduction** - *Chris Dibben, CLOSER work package 6*

10.40-11.10 **Why geography matters?** - *Jamie Pearce*

11.10-11.40 **Neighbourhood effects on education achievement** - *Steve Gibbons*

11.40 **Session 2: Case studies**

11.40-12.10 **Area Deprivation Across the Life Course and Physical Capability in Midlife: Findings From the 1946 British Birth Cohort** - *Emily Murray*

12.10-12.40 **Air pollution and its long term effect on health** - *Anna Hansell*

12.45 **Lunch**

13:45-14.15 **Geographical data in cohort studies** - *Zhiqiang Feng*

14:15 **Session 3: Analytical issues and future of research using geographical data**
Challenges of analysing geographical data in cohort/longitudinal studies

Panel discussion

14:45 **Coffee break**

15.10 **The future of using geographical data in cohort/longitudinal studies**

- *Alison Park*

15:30 **End**