Historical Geography, Economic History & Historical GIS

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- http://www.geog.port.ac.uk/gbhgis

Aims:

- Most presentations on historical GIS are about:
  - **What** we have built or …
  - **How** we have built it.
- This presentation is about **why**
  - **Why build a GIS**
  - **Why fund it**
- Relates the GBH GIS to the history of:
  - British historical geography
  - British economic history
    - … and social and demographic history

Historical Geography in Britain

- Early C20: Geography behind history
  - Geographies of the Holy Lands
  - Geographies of Borders and Battles
- 1930s-1970s: HC Darby dominates
  - Key dissidents: Mitchell, Johnson
- 1960s-70s: Quantitative Revolution
  - Limited impact on mainstream HG
- 1980s: Cultural turn, post-modernism
  - Key dissidents: Langton,Cambridge Group
  - Rejection of both technique and progress?
  - Maximising publications, minimising research

“Darbyesque” Historical Geography

- Systematic interpretation of documentary sources:
  - *An Historical geography of England before A.D. 1800* (1936)
  - Domesday Geographies (1952-75):
    - The Domesday geography of eastern England (1952)
    - The Domesday geography of northern England (1962)
    - The Domesday geography of south-east England (1962)
    - The Domesday geography of South-west England (1967)
    - The Domesday geography of Midland England (1971)
    - Domesday England (1973)
    - Domesday gazetteer (1975)
  - Baker et al: *Geographical Interpretations of Historical Sources* (1970)
  - *A New Historical Geography of England* (1976)

Key Sources for “Darbyesque” HG

- Domesday Book (1086)
- Medieval Taxations
  - Lay Subsidies (1327, 1332, 1334)
  - Tudor Taxations (1524, 1543-5)
- Agricultural Improvement
  - Probate inventories, enclosure awards
  - … but also Arthur Young, etc.
- Census: 1801 onwards

Criticisms of “Darbyesque” HG

- Emphasis on morphology, not process
  - ‘Like watching a man assembling a watch but leaving out the mainspring’
- Less attention paid to spatial framework than to documentary source
  - Domesday geographies use 1888 base
- Diachronic analysis both v. time consuming and crude
  - ‘The changing geographical distrib. of wealth in England 1086-1334-1525’ (JHG, 1979).

Statistical Sources for the GIS

ENGLAND AND WALES.

AGES OF THE PEOPLE.

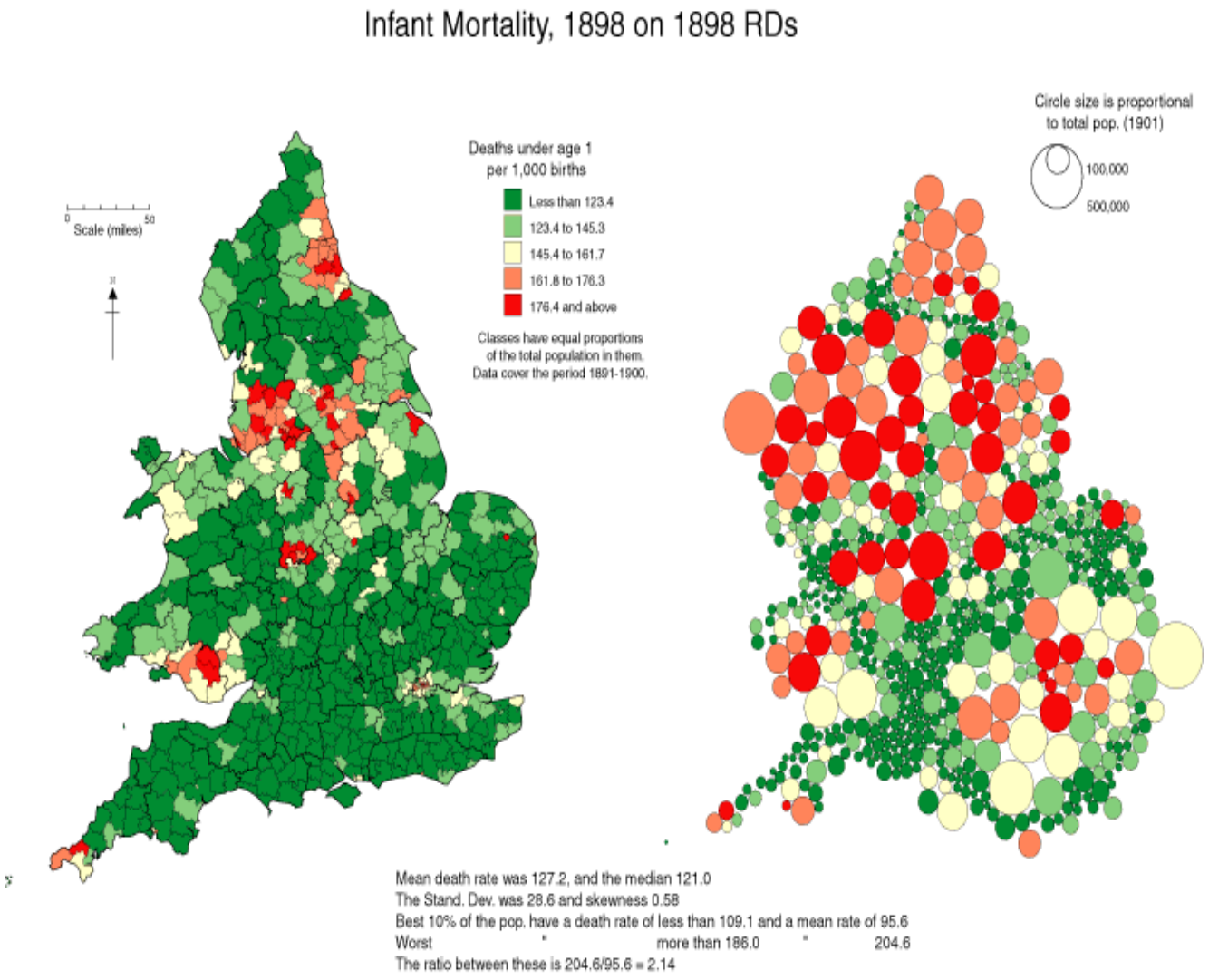
DIVISION II.—SOUTH-EASTERN COUNTIES.

Table 1.—Ages of Males and Females enumerated April 3rd, 1871—In Registration or Union Counties.*

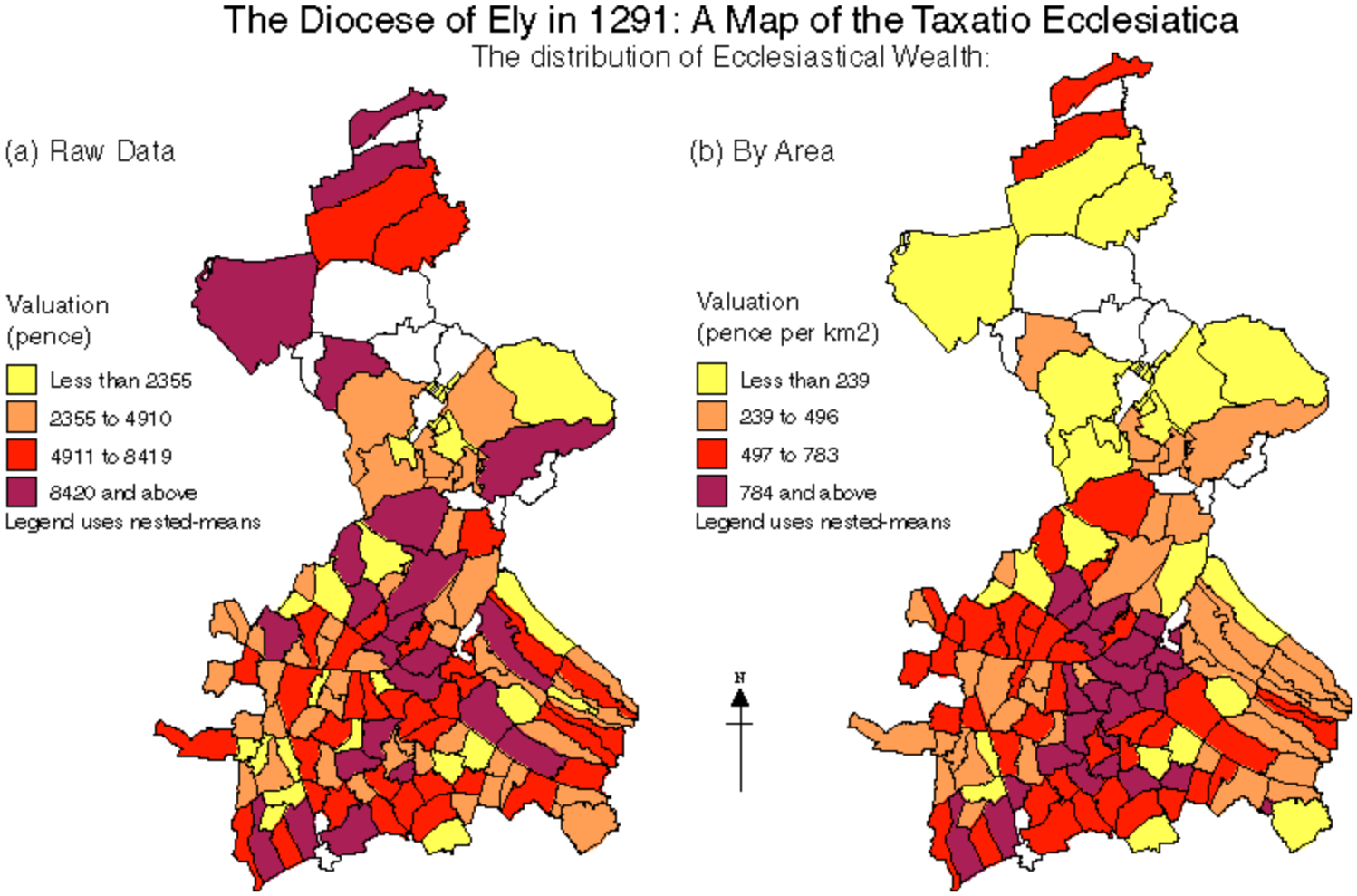
Registration or Union Counties.	All Ages. Both Sexes.	All Ages. Males and Females.	Under 5 Years.	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95–	100 and upw[s].
II.—SOUTH-EASTERN COUNTIES.	2,167,726	M. 1,064,635	143,164	129,253	116,371	102,648	91,565	79,959	74,465	62,757	55,088	47,736	43,521	34,244	29,499	21,868	16,510	9,602	4,604	1,463	272	37	4
		F. 1,103,091	142,956	129,243	113,263	99,158	99,860	88,099	76,326	66,415	60,365	51,377	47,146	37,198	31,931	23,429	17,934	10,516	5,458	1,899	443	76	8
1 **SURREY** (*Extra-metropolitan*)	365,279	M. 176,327	23,857	20,883	18,897	16,829	16,066	14,387	13,520	10,975	9,391	7,741	6,666	5,051	4,449	3,146	2,296	1,367	615	209	41	1	.
		F. 188,952	24,105	21,400	18,621	17,216	19,074	16,929	14,127	11,724	10,508	8,475	7,417	5,514	4,980	3,497	2,696	1,543	775	273	68	7	1
2 **KENT** (*Extra-metropolitan*)	629,126	M. 312,931	42,369	38,571	33,696	30,390	27,491	23,467	22,574	18,279	15,838	13,732	12,505	9,930	8,534	6,466	4,825	2,762	1,304	430	74	12	2
		F. 316,195	42,487	38,186	32,940	28,462	27,789	24,475	21,518	18,071	16,894	14,382	13,375	10,571	9,164	6,725	5,135	3,077	1,590	596	141	25	2
3 **SUSSEX**	420,910	M. 201,250	27,429	24,985	23,205	19,260	16,328	14,034	12,334	10,928	10,569	9,136	8,669	6,835	6,197	4,614	3,286	2,028	1,004	316	61	5	1
		F. 219,660	27,348	24,614	22,429	20,657	20,119	17,340	15,024	13,025	12,143	10,502	9,710	7,880	6,583	4,924	3,687	2,117	1,089	378	81	12	3
4 **HAMPSHIRE**	536,143	M. 262,207	34,474	30,947	27,664	25,556	22,621	20,202	19,532	16,237	13,544	12,005	10,916	8,419	7,077	5,088	3,894	2,348	1,128	386	72	12	1
		F. 273,936	33,945	31,188	27,168	23,192	23,368	20,792	18,158	16,250	14,544	12,623	11,528	9,086	7,547	5,596	4,389	2,597	1,368	468	101	28	.
5 **BERKSHIRE**	226,268	M. 111,920	15,038	13,867	12,819	10,668	9,064	7,819	6,765	6,338	5,745	5,122	4,771	4,009	3,332	2,614	2,109	1,157	533	158	24	7	.
		F. 114,348	15,076	13,905	12,105	9,631	9,510	8,563	7,499	6,765	6,276	5,395	5,043	4,147	3,667	2,678	2,027	1,180	636	184	52	4	2

The Table is read thus:—In Division II.—South-Eastern Counties, there were 2,167,726 persons of both sexes, viz. 1,064,635 males, of whom 143,164 were under 5 years of age,—129,253 aged 5 and under 10 years,—116,371 aged 10 and under 15 years, and so on for each respective column; and 1,103,091 females, of whom 142,956 were under 5 years of age,—129,243 aged 5 and under 10 years,—113,263 aged 10 and under 15 years, and so on.

Source Interpretation via GIS

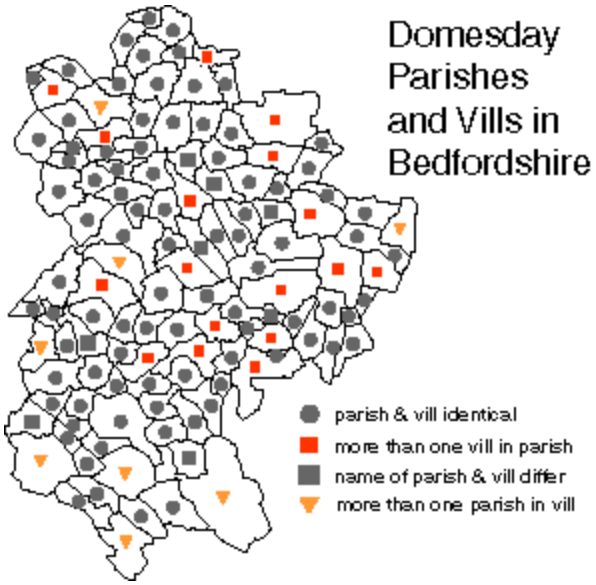


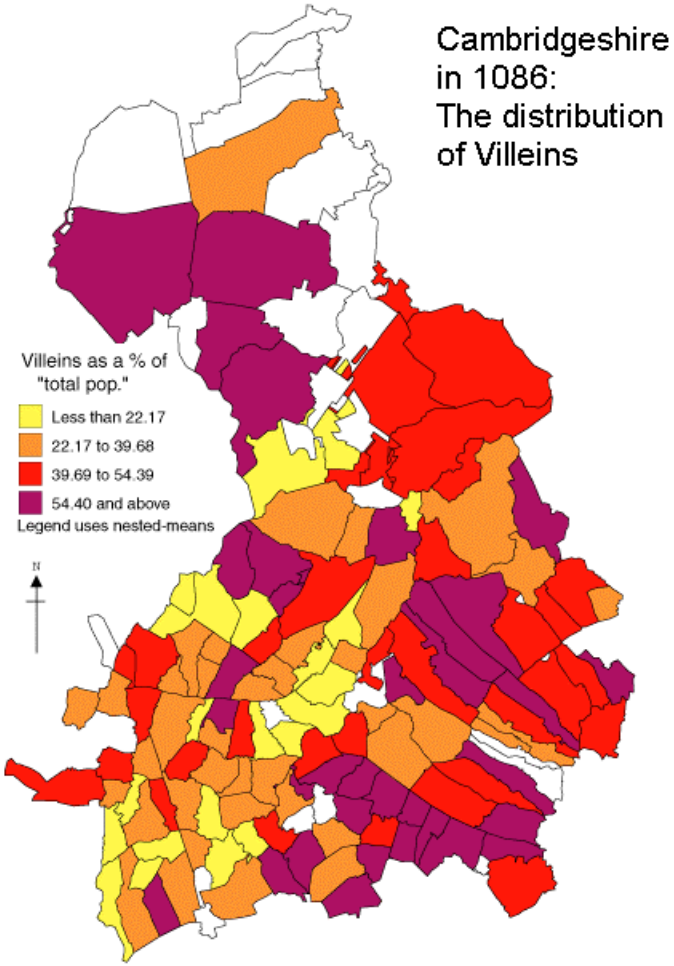
Mapping the Taxatio



Boundaries are for civil parishes in 1876 as researched by GBHGIS.. Data provided by the Manchester Taxatio Project.
Data were linked to parishes based on place name, this resulted in 98.4% of the total valuation of Ely being mapped.

Mapping Domesday



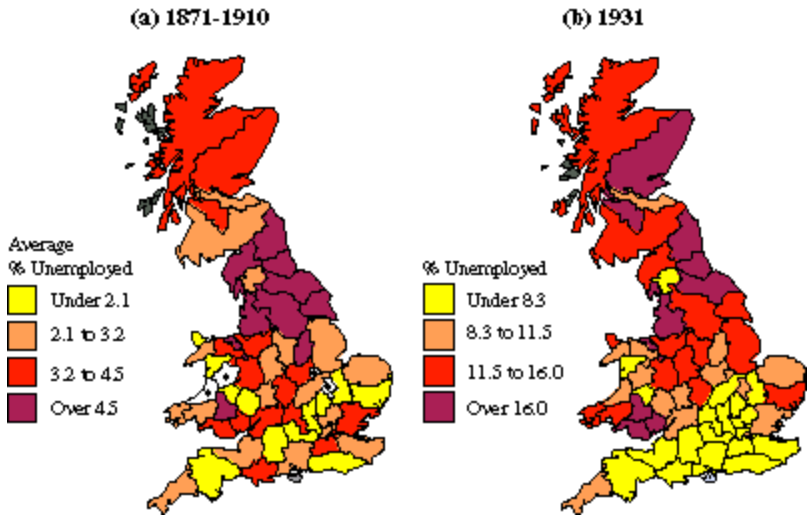


British Economic History

- Initially Institutional
- Then quantitative
- Recently, greater emphasis on regional dimension
  - Hudson ("Regions and Industries", 1989) argues that industrialisation in Britain and elsewhere occurred first and foremost within regions rather than within nations as a whole."
  - But in some ways, just a reversion to traditional studies of regional elites.
- Need to study interacting system of regions … but how?

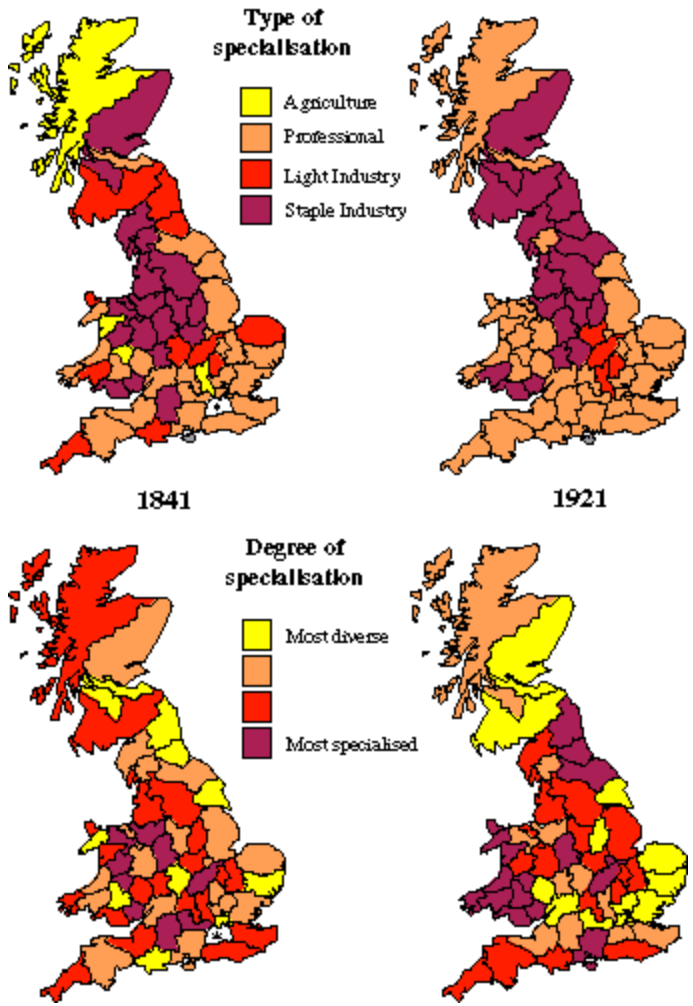
Long-Run change: Unemployment

- Early results from the core project
- Was the north of England more prosperous before the First World War?
- NB Both maps show averages from very long spatio-temporal series.
- Still comparative statics



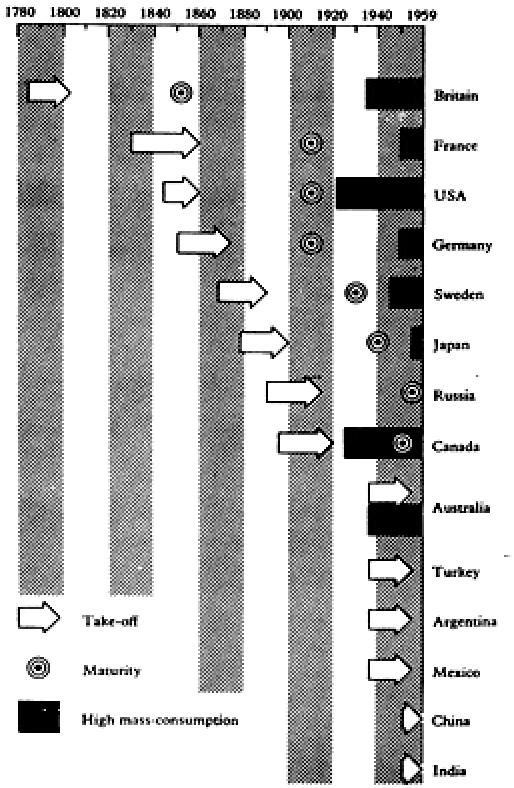
Long-Run change: Occupations

- Here examining ideas about spatial divisions of labour
- Additional problems of comparison between occupational classifications



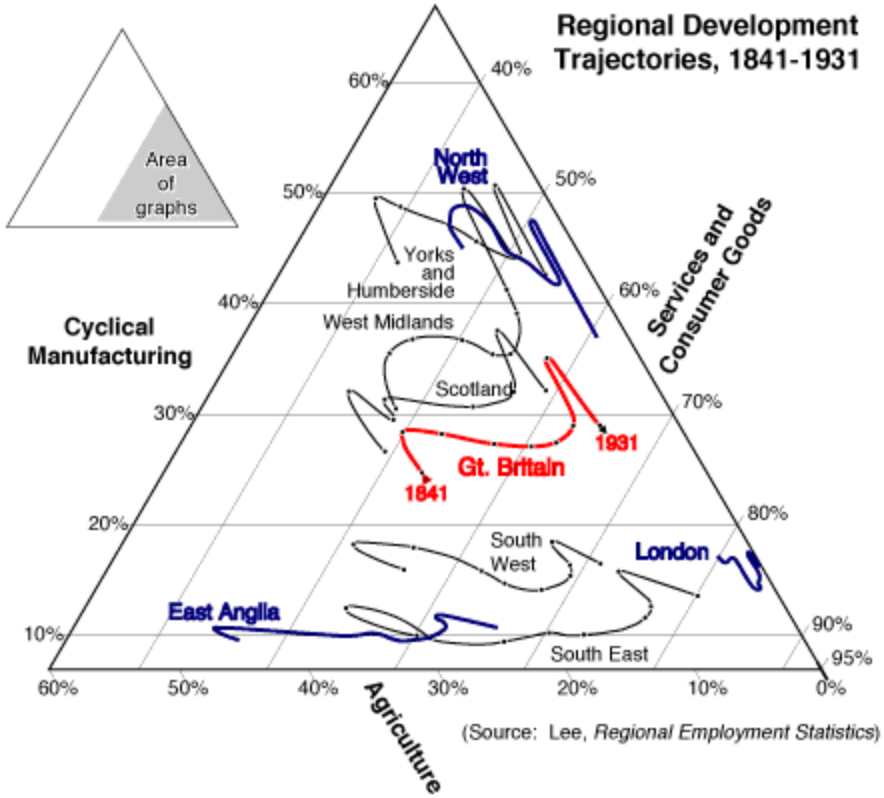
Visualising National Trajectories

- Rostow's Stages of Economic Growth
- Crude …
- But memorable ...



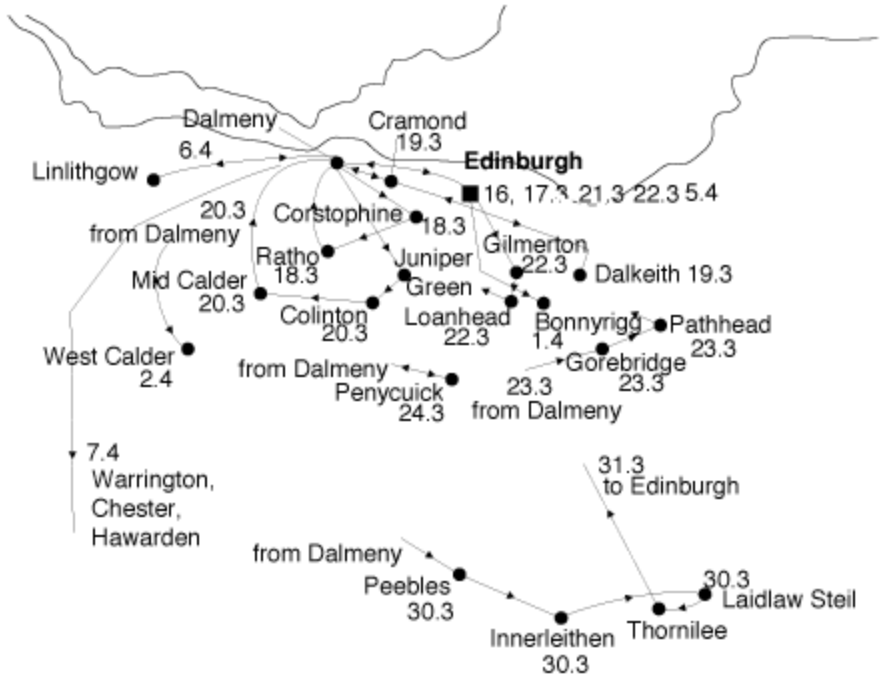
Visualising Regional Trajectories

- Using census occupational statistics ...



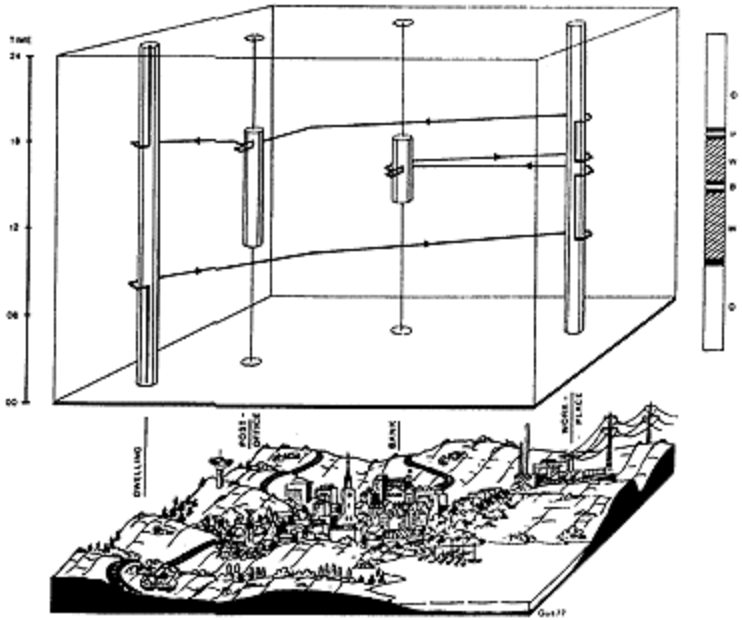
Visualising People's Trajectories (1)

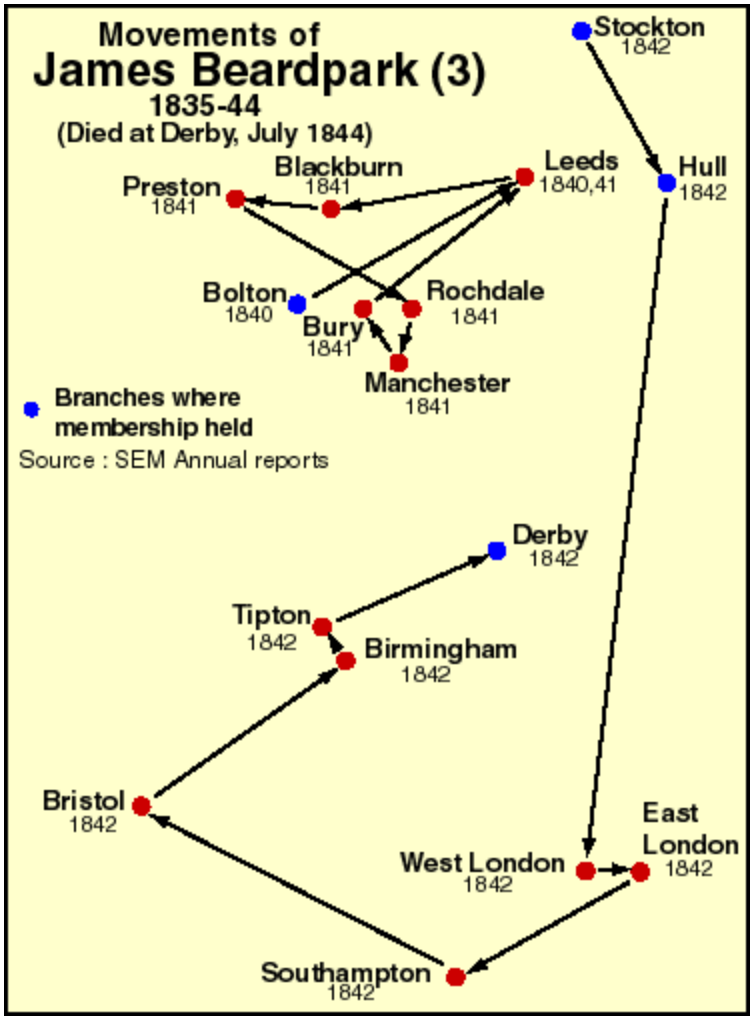
- For famous people …
- The first modern General Election campaign in Britain
- Gladstone' Midlothian campaign of 1880



Visualising People's Trajectories (2)

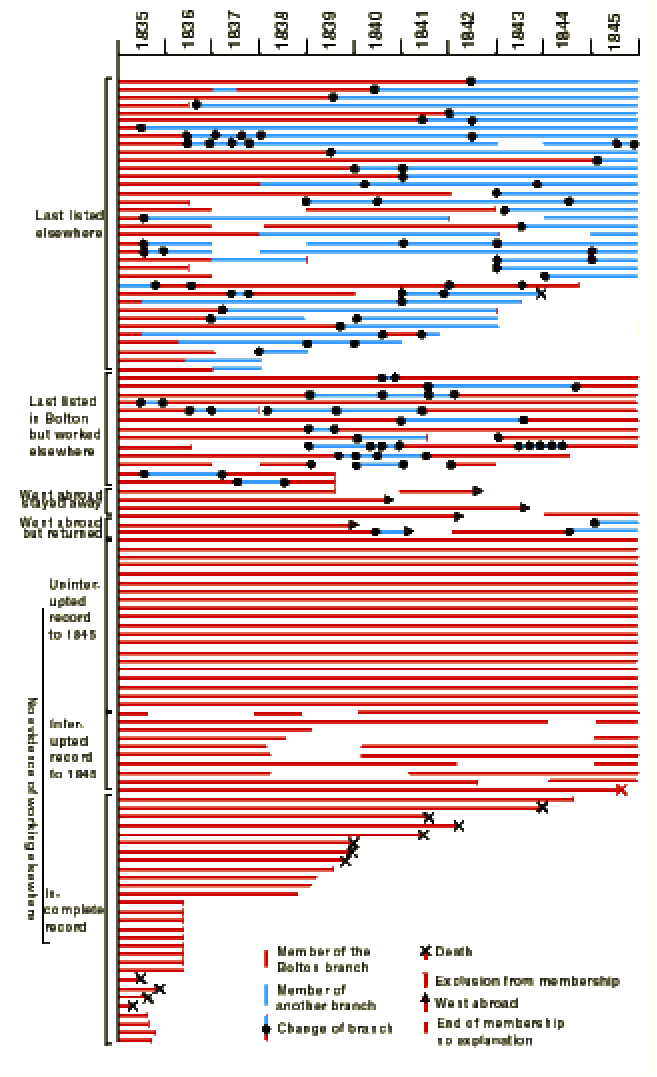
- … and for less famous people:





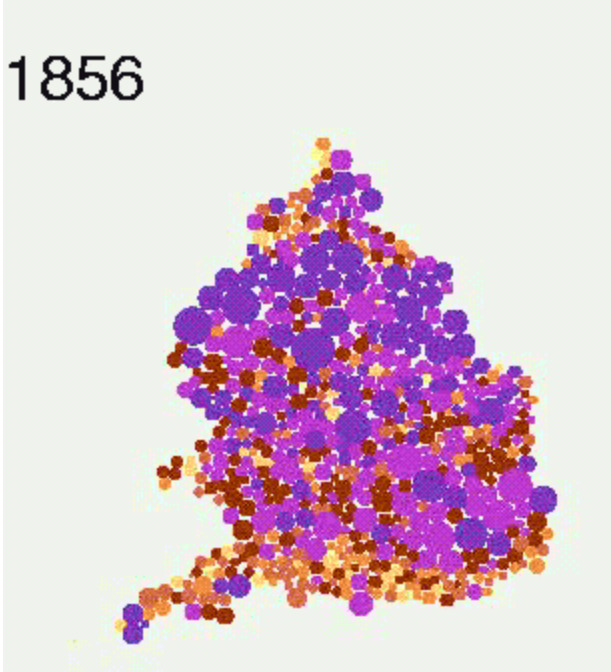
Visualising People's Trajectories (3)

- … but visualising many people's movements is hard:
- Members of a trade union of Steam Engine Makers in Bolton



True animation

- This is an ‘animated cartogram’
- It shows trends in infant mortality between 1856 and 1925
- … and if you look carefully, the shape of the country changes too.



Conclusions

- GIS-based technology provides a more rigorous framework for historico-geographical research than traditional paper-based technologies.
  - … but traditional scholarly skills are still needed.
- New visualisation technologies help the historian better understand their data.
  - … but comparative statics is **still** easier than true dynamic analysis.
- Visualisation tools also create new ways of presenting our ideas to wide audiences, but ...
  - … we must decide between builders/users and authors/readers.
  - … we need to establish and educate our ‘readers’ in a new visual vocabulary.
  - … and it is **still** hard doing this on the web.