

Lessons of the Oxford Phenomenon

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&

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In evolutionary theory...

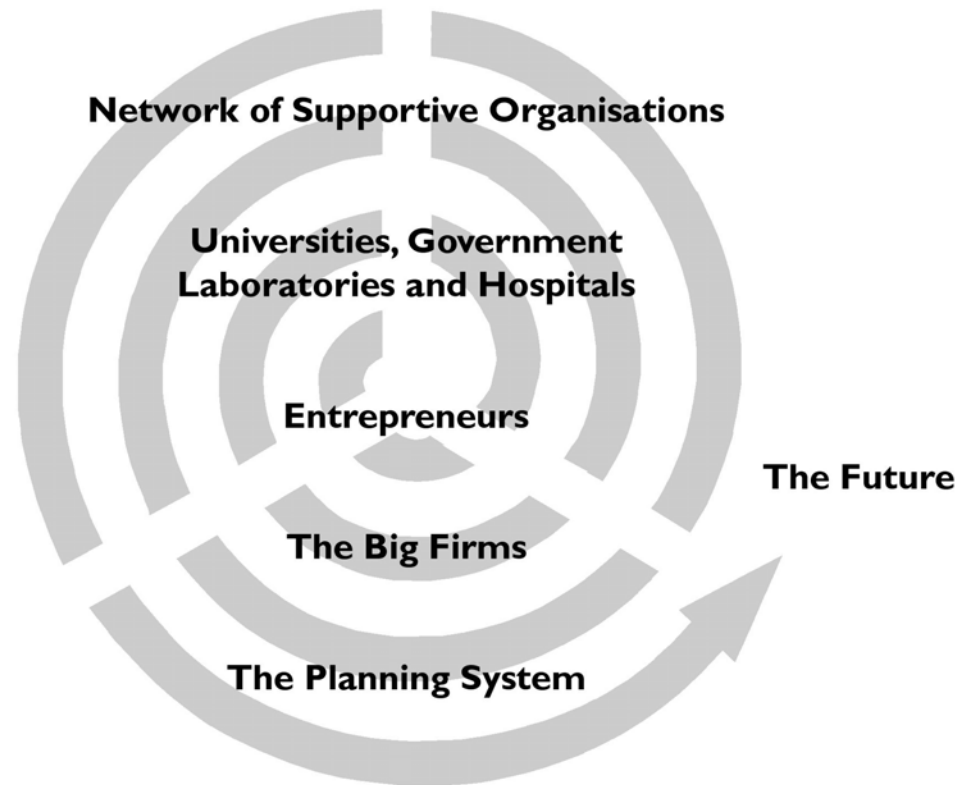
- How particular trajectories of development are selected and other types of variation are eliminated – the possibilities or limitations for choice of action (Aldrich 1999)
- Application – analysis of the interconnections between choices made by entrepreneurs and changes in national, regional and local institutional systems on the way a local economy has evolved

In practice – the Oxford Phenomenon

- What is it?
- How has it evolved?
- What works ?
- Lessons?

Enterprising Oxford

- Oxfordshire's elite scientific and entrepreneurial systems have co-evolved to produce a leading centre of high-tech entrepreneurship, especially in the biomedical field.
- Distinctive entrepreneurial decision-making processes.
- But will choices made in the county mean that it remains an incubator of small firms rather than a 'Silicon Valley'?



**Virtuous circle
Of activity in
Oxfordshire
(OEO 2007)**

The research base

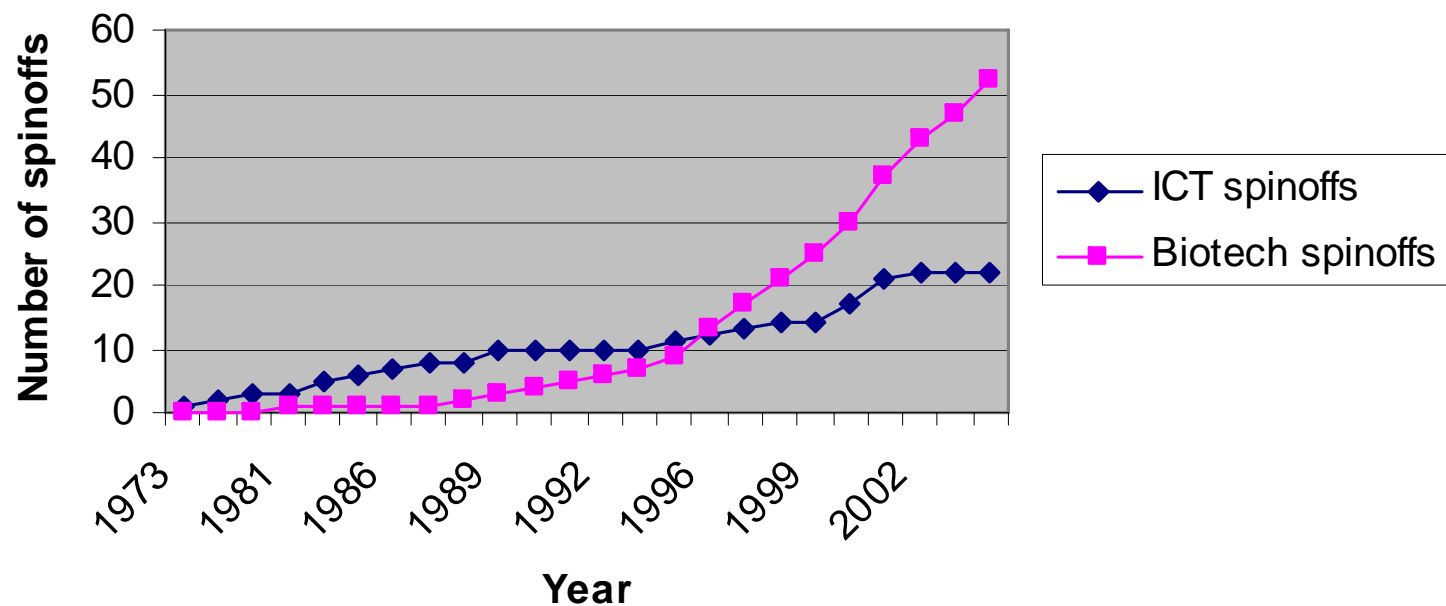
- 9 hospitals, 3 universities and 7 government laboratories
- Oxford University
 - ranked second in the world for research 2007
 - UK's most entrepreneurial university
 - UK's best university technology transfer company – Isis Innovation
- Oxford Brookes
 - one of the top 'new' universities
- DCMT Shrivenham (Cranfield University)
 - Leading defence and other technologies

The high-tech entrepreneurs

- **Mid 1980s – 182 firms employing 11,000**
- **Mid 1990s - 543 firms employing 20,000**
- **Mid 2000s - 3,500 firms employing 45,000**
 - 12% of businesses and 14% of employment in Oxfordshire
 - university and laboratory spin-offs, 9000 jobs 3% of employment in county, 47 biomedical spinoffs employing 3,500, average firm size 135

Biotech and IT – largest sectors

Population - Comparison between biotech and ICT spinoffs



Recent patterns

- Merger and acquisition by foreign companies – mainly from the US and Europe
- Growing concentrations of highly-skilled people
 - Oxfordshire 2nd highest “qualified to degree level people” county
 - Problem of lower levels of intermediate skills
- Growing polarisation with increasing clumps of low-skilled people without employment prospects

Networks of supportive organisations

- 1985 – The Oxford Trust established
- 1990s – investment and sector business networks with local and DTI support
- 2000s – networks, university activity and coordination
 - 74 Business networks
 - Increasing involvement of Oxford University in entrepreneurship
 - Regional and local coordination initiatives e.g. O2C Arc, “Diamonds for Growth”

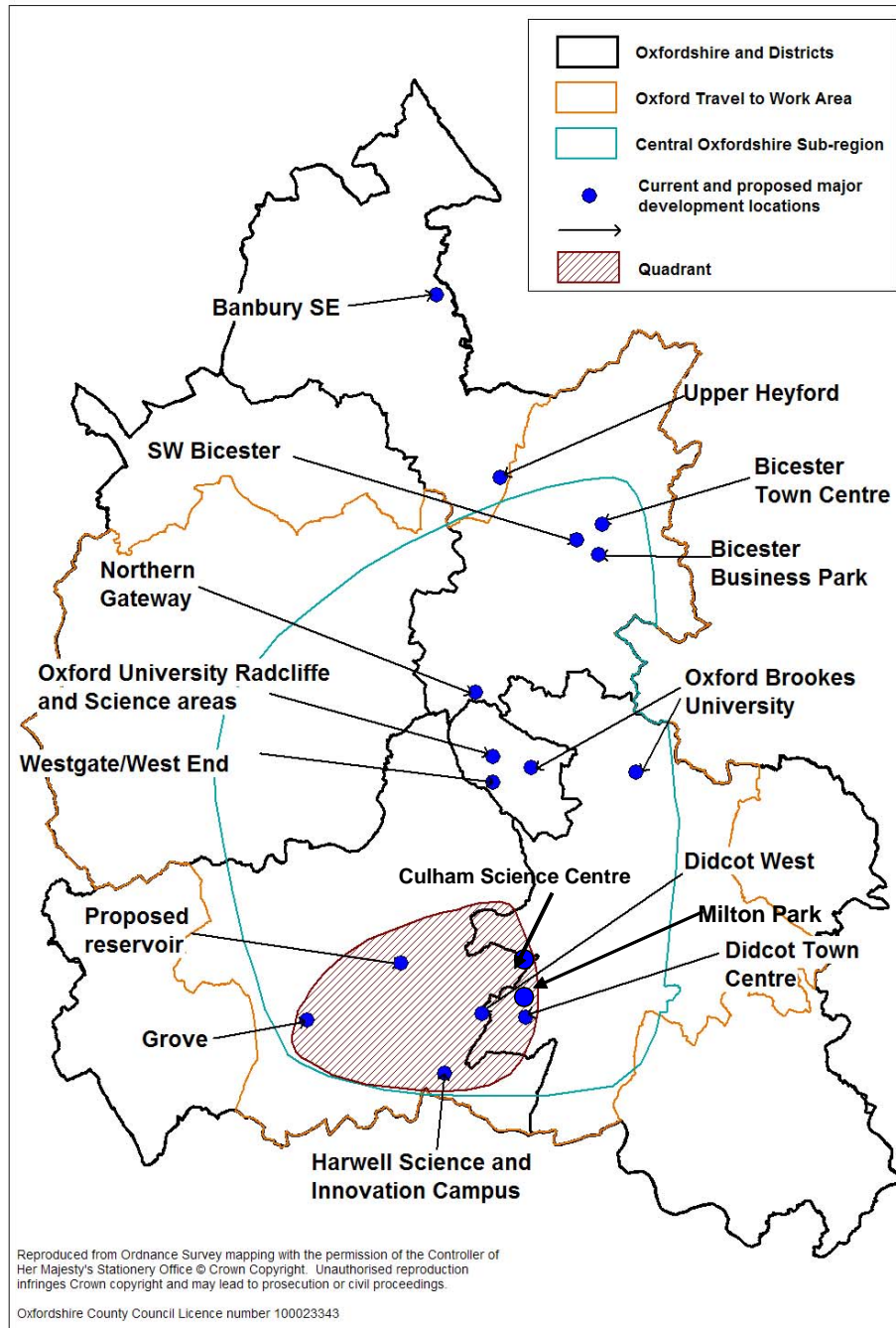
The Oxford University Innovation Structure

- **Awareness Raising**
 - Saïd Business School
 - Entrepreneurship Saïd
 - Business Plan Competition
 - Oxford Entrepreneurs
 - Venturefest
- **Education and Training**
 - Saïd Business School
 - Science Enterprise Centre
 - MBA, Executive MBA,
 - Executive Education
 - Continuing Professional Development
- **Wealth Creation**
 - Isis Innovation
 - Consultancy
 - Licensing
 - Spin-outs
 - Applied Research
 - Begbroke Science Park and Innovation Centre
 - Oxford Science Park
 - University Press
- **Supporting**
 - Consultancy
 - Isis Angels Network
 - Oxford Innovation Society
 - Regional Liaison
 - Venturefest



Evolving features

- Networks – yes
- Business angels - yes
- Incubators and science parks – yes
- Involved universities and laboratories – increasingly yes
- Management of conflicting growth vs environmental pressures – not really
- Local skills strategy - no
- Multinational companies in Oxfordshire embedded in local economy – up to a point



Lessons?

- Physical infrastructure such as incubators matter
- Collaboration and coordination now needed between local public and private organisations to give a common strategy for entrepreneurship e.g. on skills and infrastructure planning
- Leadership? Shifting centres of gravity – hence identification of support needed