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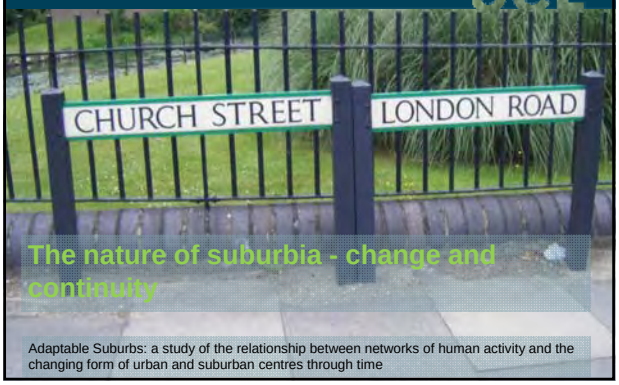

The nature of suburbia - change and continuity

Adaptable Suburbs: a study of the relationship between networks of human activity and the changing form of urban and suburban centres through time

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Key research questions

- How does the urban design of suburbs contribute to their success?
- Is the adaptability of these places contributing to their sustaining over time?
- What is the influence of social interactions and spatial movement on the economic vitality and adaptability of places?

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1. DEFINING SUBURBS

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Defining suburbs

- The suburbs are not a recent innovation.
- The stone carving of the ancient Persian city of Madaktu shows suburban domiciles situated among the palm trees outside the city walls.
- Peter Ackroyd has also commented of London's suburbs that they are "as old as the city itself" (*London: The Biography* , 2000, 727).

Relief of the Elamite city of Madaktu, Persia. The town itself, with its towered walls and its suburbs in which every house is sheltered by a date tree, is figured in the centre (668-627 BCE). Source: The Project Gutenberg EBook of 'A History of Art in Chaldæa & Assyria', v. 1, by Georges Perrot and Charles Chipiez, page 332

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Towards Successful Suburban Town Centres Project: www.sstc.ucl.ac.uk

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The suburban environment: sprawl?

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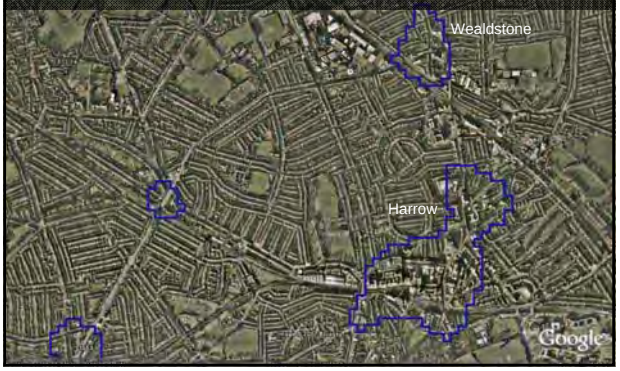
Or town centres with residential hinterlands?



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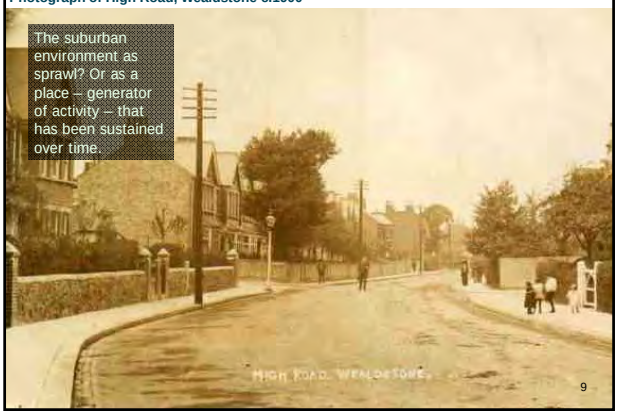
Photograph of High Road, Wealdstone c.1900

The suburban environment as sprawl? Or as a place – generator of activity – that has been sustained over time.



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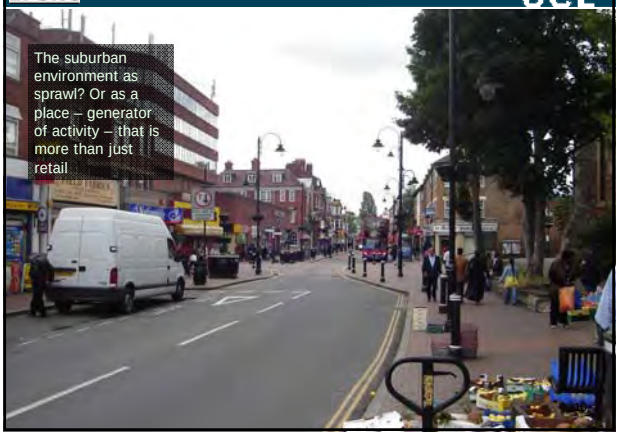
The suburban environment as sprawl? Or as a place – generator of activity – that is more than just retail



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2. KEY FINDINGS FROM PREVIOUS RESEARCH

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2. KEY FINDINGS FROM PREVIOUS PROJECT

Multi-scale movement and activity

Borehamwood is functioning simultaneously as local centre, commuter route and dormitory suburban town centre

This is an outcome of its multi-scale properties

2. KEY FINDINGS FROM PREVIOUS PROJECT

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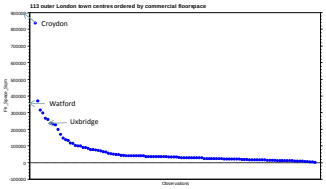
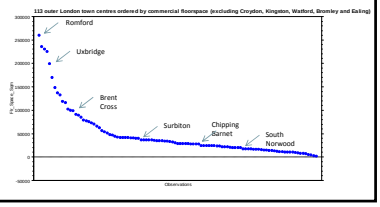
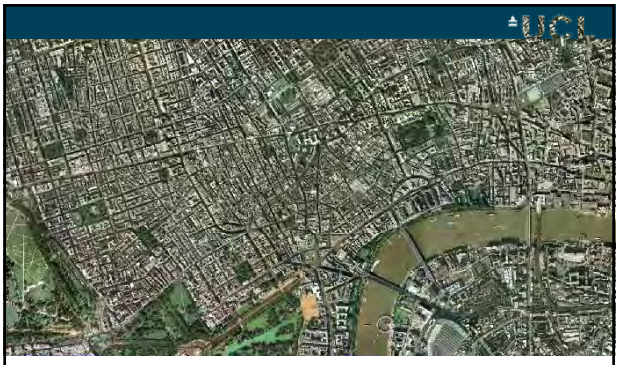
Long tail of activity

Approx. top 15 centres account for 50% of commercial floorspace; approx. 100 account for the other 50%

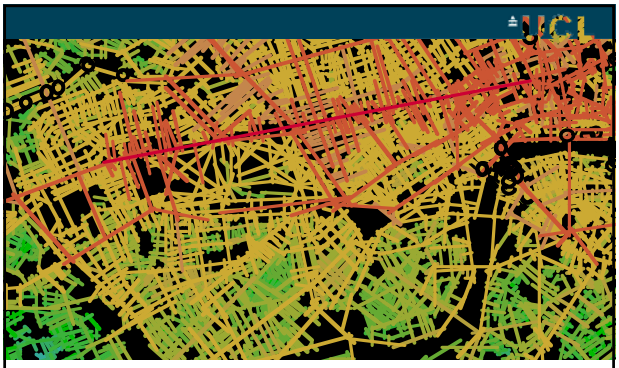
Smaller centres contribute to sustainable urban life by supporting socio-economic and cultural diversity across a wide range of activities and nurturing them at the local scale. Essential links in the chain



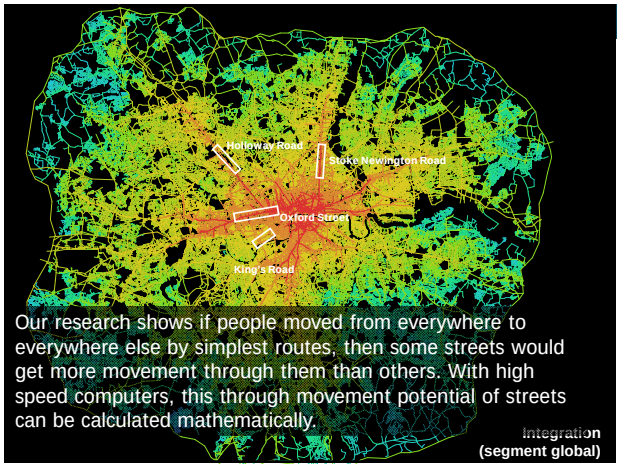




Cities are very complex systems, but they grow from a simple idea: they are large dense aggregates of buildings linked by space. The space takes the form of a linear network, which we call a town plan or street network. It's what we see when we look down from above.

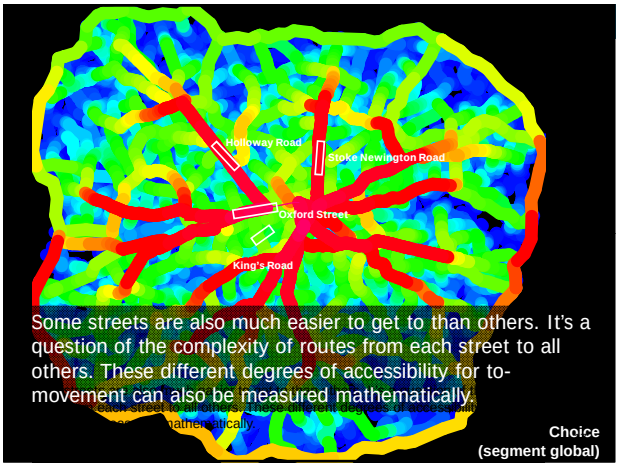


It is over 20 years since space syntax suggested this network might be of interest in itself for understanding cities, by showing that the network had certain potentials which could shape how cities worked. Here we see a network model that calculates all potential movement to central London.



Our research shows if people moved from everywhere to everywhere else by simplest routes, then some streets would get more movement through them than others. With high speed computers, this through movement potential of streets can be calculated mathematically.

Integration (segment global)



Some streets are also much easier to get to than others. It's a question of the complexity of routes from each street to all others. These different degrees of accessibility for to-movement can also be measured mathematically.

Choice (segment global)

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Land-use and choice

Small-scale spatial model reveals long-tail of activity, longevity of non-residential presence in the area

Choice radius 400

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Land-use and choice

Distribution of uses varies across location and scale of potential journey.

Choice radius 800

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Land-use and choice

A given street or area may be central at a local scale but relatively segregated at a larger scale.

Choice radius 1600

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Adaptable suburbs 2010-14

3. RESEARCH PROGRAMME:

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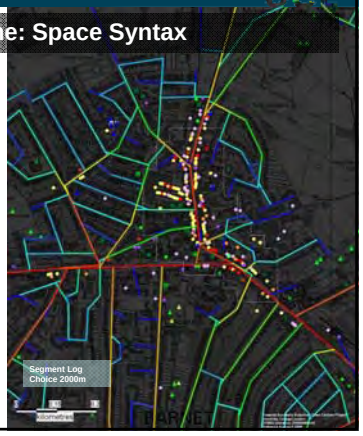
Research programme: Space Syntax



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Research programme: Business ethnography

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Research programme: qualitative GIS

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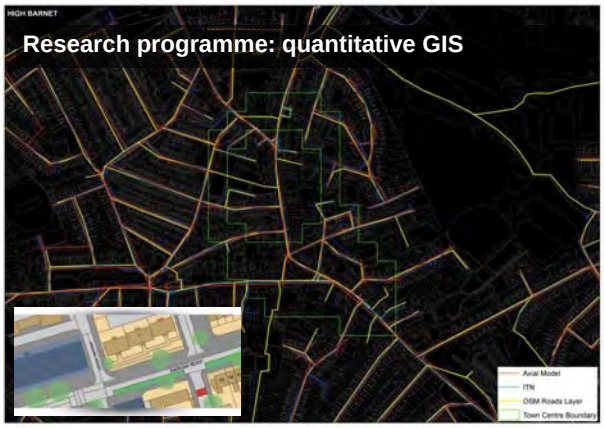
Research programme: quantitative GIS



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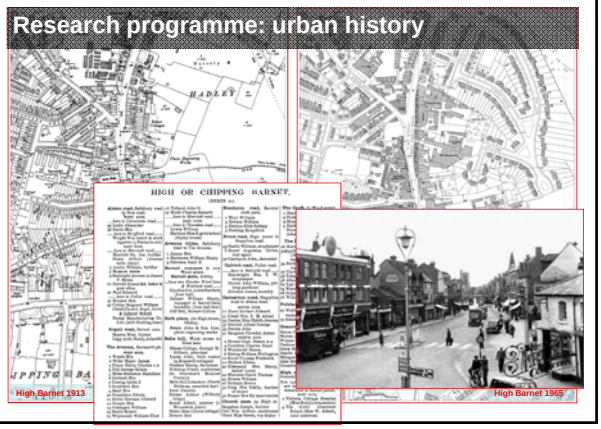
Research programme: urban history



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4. RESEARCH IMPACT (KNOWLEDGE TRANSFER)

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4. Research Impact (Knowledge Transfer)

- Inform social-economic policy
- Advance analytic and modelling capabilities
- Benefit government agencies, civic society and the third sector
- Raise the profile of suburbs as having a role to play in the future of urban sustainability

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Further information: **http://www.sstc.ucl.ac.uk**
Blog: **http://uclsstc.wordpress.com/**
Twitter: **@AdaptableSuburb**

5. QUESTIONS