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SAID BUSINESS SCHOOL

MAPPING THE JOURNEY: THE RETAIL EXPERIENCE OF GEOGRAPHIC INFORMATION

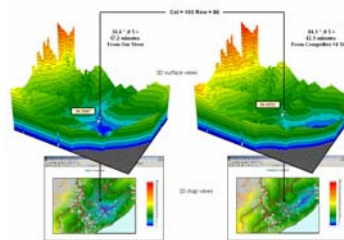
*Dr Jonathan Reynolds
Said Business School, University of Oxford*



Outline



- Mapping the journey: looking back
 - John Snow
 - Charles Booth
 - Chas E Goad
 - William Applebaum
- The death of distance?
- Mapping the journey: looking forward
 - Scalability
 - Mashability
 - Mobility
 - Virtuality
- Official mapping futures
- Challenges for retail location specialists

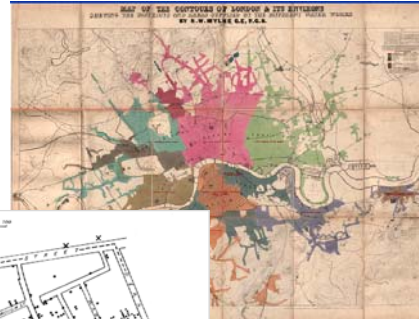


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Dr John Snow (1813-58)



- A doctor, but also an innovative cartographer
- Believed that the spread of cholera was not simply from one individual to another, but that it is assisted by another agent
- Suspected that the drinking water was the culprit
- Studied the water use pattern among different London neighborhood and by mapping these neighborhoods, revealed a water pump in Broad Street as the culprit



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Charles Booth, 1840-1916



- Concerned by
 - contemporary social problems
 - Unsatisfactory nature of the 1884 Census
- Undertook a self-funded survey of life and labour in London (1886-1903)
 - Poverty
 - Industry
 - Religious influences
- Interviews and eyewitness descriptions
- Raw data that was later used to compile
 - statistical reports
 - maps of London coloured street by street to indicate the levels of poverty and wealth
 - responsible for the idea of the 'social determinants of health'



Sources: Charles Booth Online Archive, A-Z Mapping Co.

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Maps Descriptive of London Poverty, 1898-9



Source: Charles Booth Online Archive

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Chas. E Goad

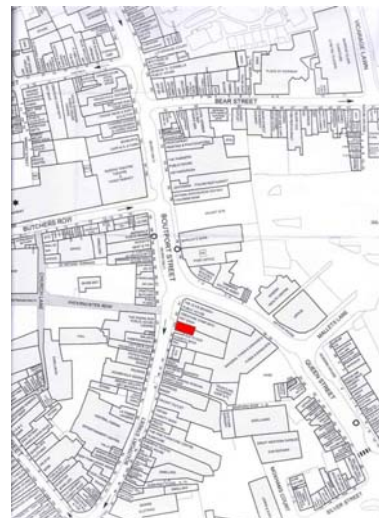


- Insurance companies commissioned maps assessing potential liabilities from the 18th century
- Chas E Goad produced plans of London and 37 other cities from 1888
- In 1965 the Department for Trade and Industry commissioned Goad to produce plans of over 1000 shopping centres in the UK
- Role of the surveyor critical
- Goad acquired by Experian
- Now covers 2,500 shopping areas and, in digitised form, provided integration with other GI data
- 26,000 publications since the mid 1960s



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GOAD Plans



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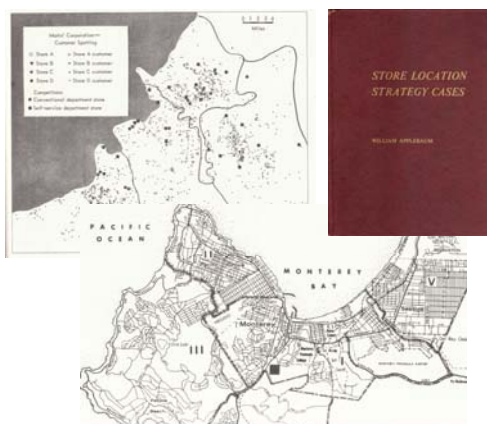
William ("Bill") Applebaum



- Chief of Staff, Market Research Division, The Kroger Grocery and Baking Company / Lecturer on Food Distribution at Harvard University
- Shaped the way we think about modern business location geography
- Papers in *Chain Store Age* from 1940
- *"In the early decades of the supermarket industry, when stores were still typically relatively small and leases short, sophisticated site evaluation and store location strategy received only spotty attention from the supermarket industry.*

"As the industry was approaching maturity, this inadequate attention became a major concern, and the demand for store location research increased significantly." (Applebaum)

"I was particularly concerned how to use maps as tools of research and analysis, and as a means of presenting in precise and readily understandable form the results of the research and the recommendations."



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The "Death of Distance"

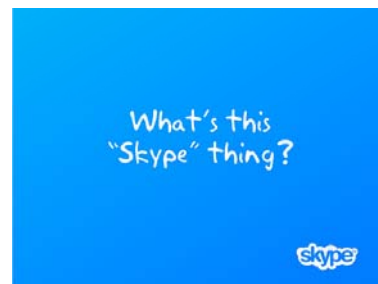
- What is it?
- New media has made communication so global that the additional cost of sending a message an extra hundred kilometres is effectively zero
- The consequence is a frictionless realm of social and economic interaction in which distance loses its meaning
- *"If the miles separate you from those you love, take heart..."* (Frances Cairncross)
- Aberdeen is as close to Alaska as it is to Andover
- Is location intelligence under threat as a result?
- Where is the evidence?



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A country called Skype

- +883 country code agreed by the International Telecommunications Union
- Prefix a 12-digit VOIP number anywhere in the world
- Creates an iNUM - a portable, permanent global phone number

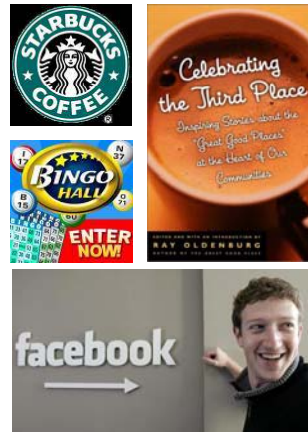


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The role of place

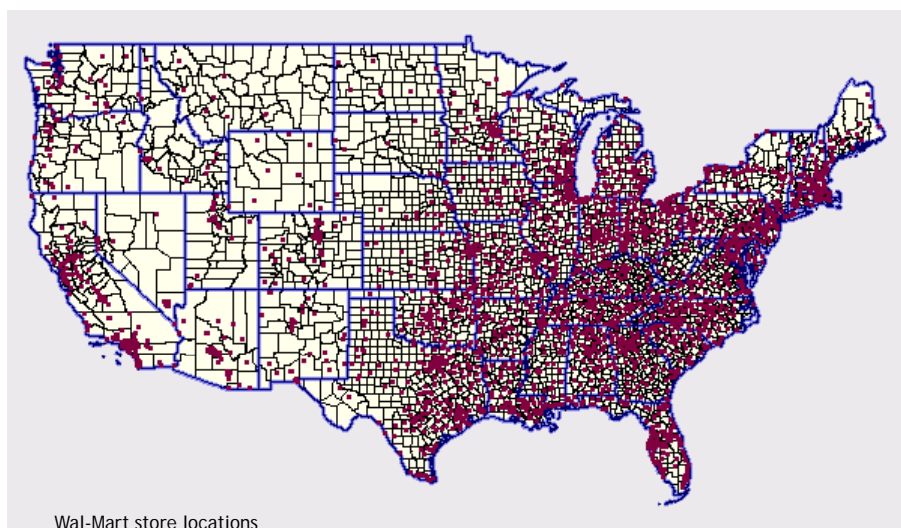


- Whilst the power of distance has eroded, it should not be confused with any diminished meaning for PLACE
- Place influences both the content and context of decisions. Lifestyles, work life habits, family and friendship networks and the like all affect the perception and behaviour related to behaviours.
- The "third place" (Putnam, 2000; Steinkuhler & Williams, 2006)
 - The "first place" the home and those that one lives with.
 - The "second place" is the workplace — where people may actually spend most of their time.
 - Third places are "anchors" of community life and facilitate and foster broader, more creative interaction
- The third place is:
 - Free or inexpensive
 - Highly accessible
 - Involves regulars but also new friends



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Many of the questions remain the same



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1. Scalability

e.g. Google Earth/MS Virtual Earth

- Overlays
 - Store and centre locations
 - Choropleth mapping
 - 3D visualisation
- Fly-throughs
 - E.g. Chicago
- Panoramic street views/images
 - Google Street View
 - Seety (1000kms of London streets with a total of 171,103 images)
- Sophisticated data fusion
 - E.g. Google - congestion data
 - E.g. Buzztracker - news
 - E.g. AVE Video Fusion - CCTV



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Streetview products



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AVE Video Fusion



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2. Mashability



Geographic Data

- E.g. GeoCommons Finder!/Maker!
 - Finder! a browser-based application for finding, organizing and sharing GeoData in common formats.
 - Maker! A browser-based map creator



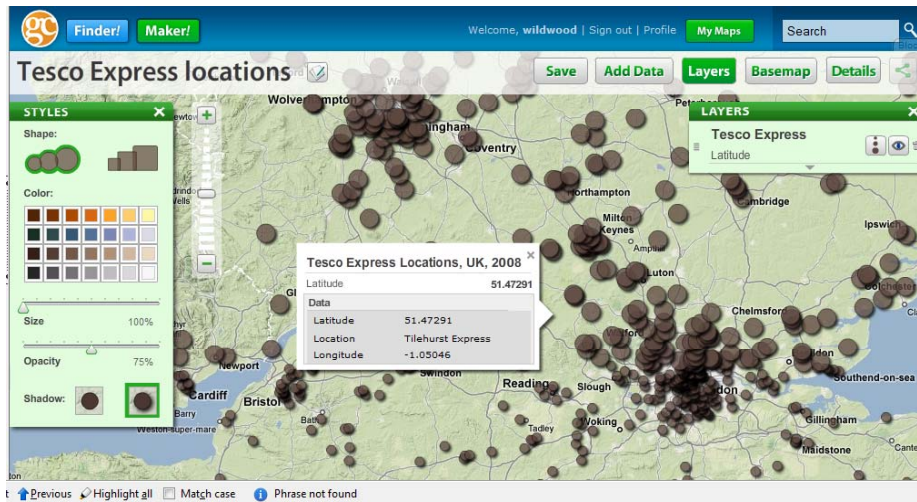
Collaborative Mapping

- *"The advent of user-contributed data allows nontechnical people to publish their own maps"* (Sean Gorman, CEO, FortiusOne)
- E.g. Wikimapia
- E.g. Openstreetmap.org



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Collaborative mapping: GeoCommons *Maker!*



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3. Mobility

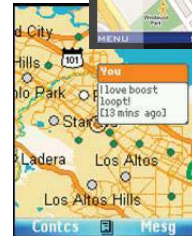


- Information and proximity services
 - Local weather, news, 'Find nearest store', concierge
 - Tracking of people and assets
- Navigation
 - Pedestrian & vehicle
 - Congestion alerts
- Community and networking
 - Find a friend/find a date
 - Social networking
 - geocaching
- Solutions in search of problems?

ANDROID



Sat-nav lorry 'risk' to buildings
 Some drivers "find evidence" on satellite navigation devices to getting some of Britain's historic buildings at risk, campaigners claim.
 The Society for the Protection of Ancient Buildings (SPAB) says growing numbers of lorries are directed to roads not designed to take them.



"The privacy concerns are just monumental in the US"

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Mobile map sharing and tracking



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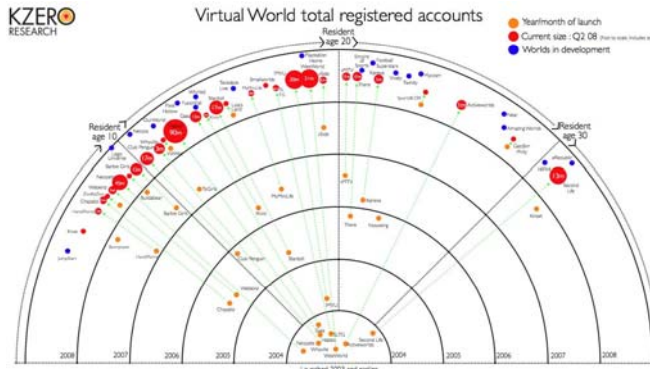
..or fear-based services?



- Emergency response
 - Terrorist attacks, earthquakes, tsunamis, typhoons
- Child tracking
 - Astray alerts
 - 45% parents with children under 13 'interested in and willing to pay'
- Find a friend - the dark side
 - proximity based SMS
 - periodic SMS to friends and family
- "I used to be worried when my boyfriend didn't answer calls... Now I can rest assured that he is at work or busy attending a seminar"
- \$1.54bn business in Korea, 150 LBS services

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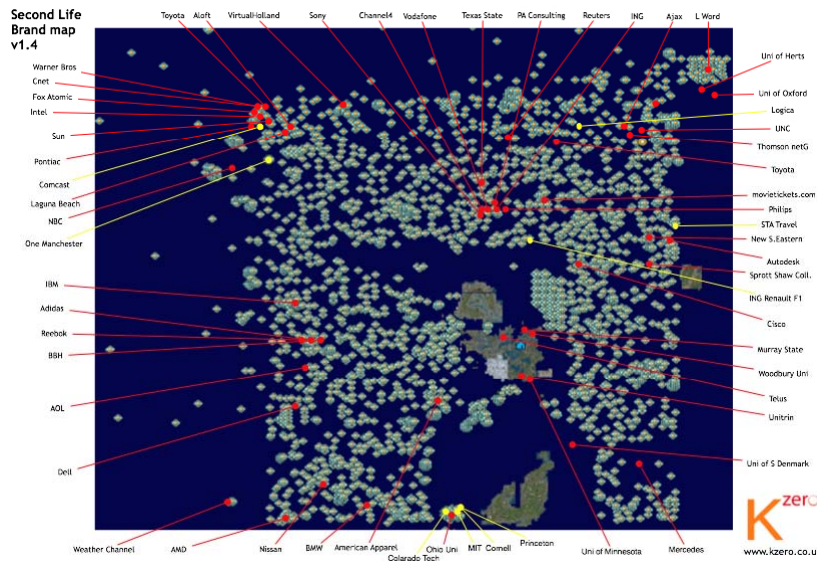
4. Virtuality: virtual worlds



- E.g. Second Life
 - Creative massively multi-player online role playing game (MMORPG)
 - 13,080,000 users, (1/2mn active in June 2008, 70,000 concurrent users)
 - Avatars and virtual economy
 - Virtual real estate - 1,000 km²
 - Virtual commodities
 - 60,000 profitable 'businesses'
 - \$300mn GDP 2008 (Seychelles)

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Second Life Brand Map



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Virtual retail entrepreneurs: Armidi

- Shopping village founded by Nicole David, Loa Marquez and Liam Oliver in 2007
- *"We wanted something different than your average box-on-a-wall store. We wanted something original and reflective of Europe."* (Liam Oliver)
- Six brands
 - Armidi (leisure)
 - Elephant Outfitters (casual- & beachwear)
 - Gisaci (upscale brands)
 - Armidi Gisaci (upscale accessories)
 - Armidi Beauty
 - Intimizzo (lingerie)
- Consumer reactions
 - 'feels like Rome'
 - 'quality of products & presentation'

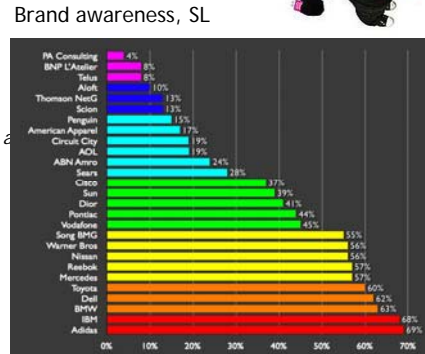


SECOND LIFE OR SECOND THOUGHTS?

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Methodological issues

- Netnography (Kozinets, 1997, 2002)
 - *'a written account of online cyberculture informed by the methods of cultural anthropology... adapting ethnographic research techniques to study the culture and communities that are emerging through computer-mediated communication'*
 - Written communications between participants and fieldnotes, describing reflecting upon and analysing what has been observed during the research process
- E-word-of-mouth
 - *"Any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet".* (Hennig-Thurau et. al., 2004)
- Netnography in virtual worlds
 - Capturing interactions in world
 - Lurking
 - Masquerading
 - 'Member checking'



Source: Reperes, 2007

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Official mapping futures



- Britain's public sector information is held by some 400 government departments, agencies and local authorities, much of relevance to retailing
 - House values
 - Flooding risk
 - Traffic data
- Free Our Data argues that:
 - the government should not run businesses (trading funds)
 - the government should be charged with collecting the best data.
- E.g. OnOneMap.com
- E.g. Interactive Crime Maps

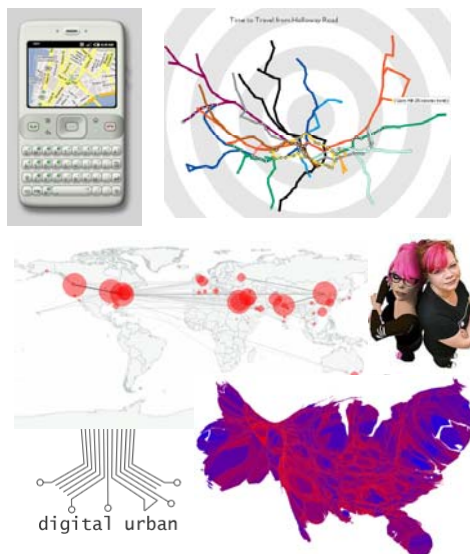


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Challenges for retail location specialists



- Mapping systems
 - Rapidly evolving
 - Steep learning curves for DIY
 - New environments and contexts
- User-generated content
 - Enormous innovation
 - Quality assurance
 - Official data innovation lacking
 - Erosion of official map base
 - Charging for and accessibility of official data
 - Standards
- Technology
 - Not of itself an issue in terms of cost or availability
 - Technical skills and talent
- Economic
 - Always driven by commercial requirements
 - *"I was particularly concerned how to use maps as tools of research and analysis, and as a means of presenting in precise and readily understandable form the results of the research and the recommendations."* (William Applebaum)



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Oxford's **Retail Location Analysis** course, now in its 22nd year, offering managers with planning, development and site assessment responsibilities the opportunity to explore the latest thinking in retail location analysis

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