LAYERING TIME AND SPACE

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Layering time and space through mapping medieval urban geographies using GIS

- Two current challenges:
  1. Finding the right web-GIS/mapping platform for delivering spatial data – going from a desktop GIS to a distributed GIS…
  2. Defining new research agendas through the application of spatial technologies – shaping medieval studies at a global scale…
1. Finding the right web-GIS/digital mapping platform

Walking Through Time

“SatNav for historical maps”
The iPhone app that combines GPS technology with old maps to allow users to walk through time.

What
Available NOW for iPhones using iOS6. Download [here](url)

Walking Through Time is a mobile application that allows smartphone users with built-in GPS to not only find themselves in the present, but find themselves in the past. By selecting available historical LID maps, users will be able to scroll through time and navigate places using maps that are hundreds of years old.

Funded by a JISC rapid innovation grant, the application was developed collaboratively between Edinburgh College of Art and the University of Edinburgh. The idea emerged from a conversation during a University of Edinburgh mapping of the 18th century group and was inspired by the work of Richard Hodgetts, Stuart Willett and Stephen Pickard.
Discover Medieval Chester
AHRC-funded knowledge transfer research project
http://medievalchester.ac.uk/
Web-resource launched May 3!

The city of Chester has a rich medieval heritage. The legacies of this are present today in the city’s surviving townscape, in its museum collections, and in the remarkable body of medieval multi-lingual literature which reflects the experiences of diverse cultural and ethnic communities within this dynamic city on the border of England and Wales.

Drawing together material, textual and visual culture and forging connections between the medieval past and the modern urban environment, Discover Medieval Chester will produce a range of resources, including:

- A website with an interactive map and customisable “city tour” feature
- A major exhibition at the Grosvenor Museums, Chester in summer 2013, later transferring to Wrexham
- A new artwork at St. John’s ruins, Chester, with joint funding from Cheshire West and Chester Council (from March 2012)
- A range of themed medieval city tours in printed brochure form

A long search across different GIS-based research projects for online platforms:
- ‘Mapping the Medieval Townscape’ (2003-2005)
- ‘Mapping Medieval Chester’ (2008-9)
- ‘Linguistic Geographies’ (2009-11)
- ‘Discover Medieval Chester’ (2012-13)
“Mapping Medieval Chester”
Web-served ‘distributed’ GIS (using MapServer)
Mapping the Medieval Townscape: a digital atlas of the new towns of Edward I
Keith Lilley, Chris Lloyd, Steve Trickett, 2005

The Atlas

CAERNARFON (Llanbellog), Caernarfonshire

NGR: SH478628
Type: Castle town with stone defences
Date of Charter: September 8 1284
Number of Burgages: 55 in 1298
Number of Burgesses: 57 in 1298
Size of Burgage: eighty by sixty feet
Area of walled town (c. 1300): 101/3 acres/41,800m² (excluding castle)
Overall dimensions of walled town (c. 1300): 630 feet (High Street)/740 feet (Castle Street/Market Street) (183m/226m)

Interactive Map:

Help for using the Interactive Map
An Interactive Map has been provided to enable you to examine the various spatial data compiled throughout the survey using basic WebGIS tools. To begin using the map click the button labelled ‘Switch Layers’ and select the ‘Historic’ layer. If you have any queries about the map or its use please contact: Keith Lilley, School of Geography, Queen’s University Belfast, University Road, Belfast BT7 1NN, Northern Ireland.
“Discover Medieval Chester” AHRC-funded knowledge transfer research project
Overlaying medieval Chester onto Google Earth: ‘Discover medieval Chester’
Digital Atlas of Derry/Londonderry (Northern Ireland) - [http://go.qub.ac.uk/derrycityatlas](http://go.qub.ac.uk/derrycityatlas) - based upon the Irish Historic Towns Atlas (IHTA).
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    - Hidden histories through quantifying qualitative data
    - Comparing patterns and forms across time and space
Excavating the Gough Map (c.1370) – creating a “distortion grid” using MapAnalyst

See Lilley K D and Lloyd C D, ‘Mapping the realm: a new look at the Gough Map of Britain (c.1360)’, *Imago Mundi* 61(1) (2009), 1-28
Exploring the design and planning of medieval urban landscapes: Edward I’s ‘new towns’ and the conquest of Wales, 1277-1307

Comparing urban forms in GIS: looking for common design traits in the new towns of Beaumaris and Conwy

Using analytical methods to identify and quantify recurring patterns and forms in the layouts of Edward I’s new towns in England and Wales: eg were similar designs used between medieval new towns?

Winchelsea (1283) and Rhuddlan (1277)

Calculating angles of street-intersections using field-survey measurements (GNSS) to analyse comparative urban form.
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