

LAYERING TIME AND SPACE

Keith Lilley

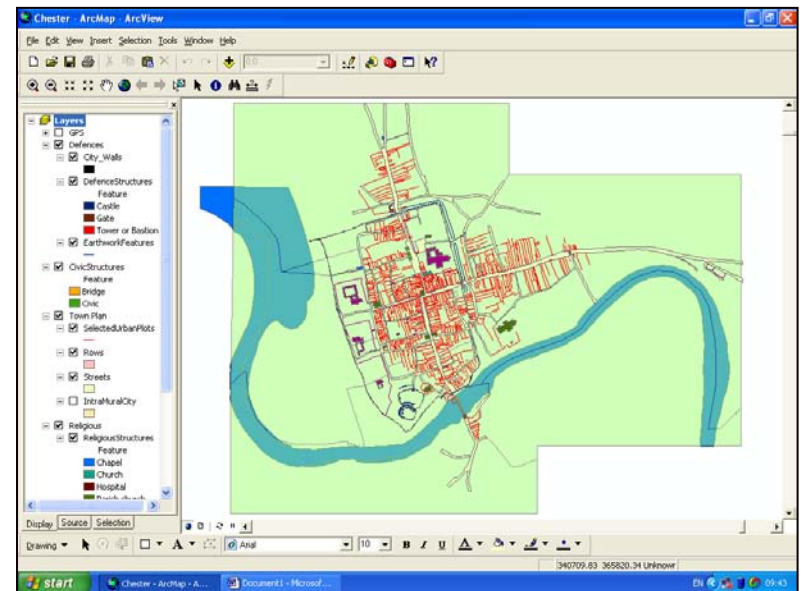
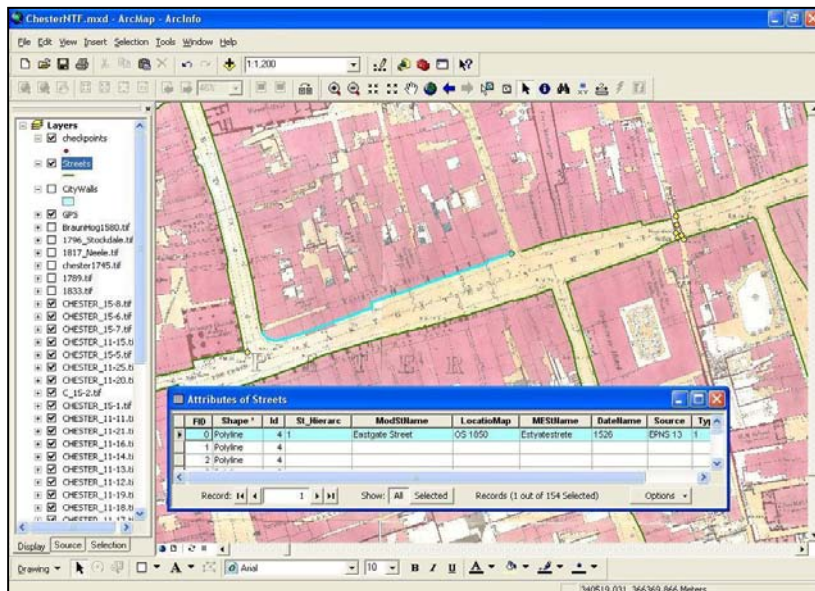
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Layering time and space through mapping medieval urban geographies using GIS

- 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...



PREV

NEXT

1935

1977

2007



- :: BEGIN IN THE PRESENT
- :: BROWSE, NETWORK, SEARCH, UPLOAD, & DOWNLOAD CONTENT BASED ON SPACE & TIME
- :: TRAVEL BACK IN TIME & CREATE FAMILY GENEALOGIES, MAKE THE PAST COME ALIVE.

1. Finding the right web-GIS/digital mapping platform

Walking Through Time

Available for iPhone now

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



Home Featured Gallery Links Press Use it Video Who Why

What

Available NOW for iPhones using iOS4. Download [here](#) now

Walking Through Time is a mobile application that allows smart phone users with built-in GPS to not only find themselves in the present, but find themselves in the past. By making available historical UK 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 meeting of the IT Futures group and was inspired by the work of Richard Rodger, Stuart Nicol and Stephen Vickers.

Walking Through Time is a JISC funded iPhone App that lets visitors to Edinburgh walk over historical maps. The maps are provided by Landmark Information Group and the National Library of Scotland. The software was developed by Edinburgh College of Art, University of Edinburgh.

Historical tours were provided with the kind assistance of Edinburgh World Heritage and Margaret Stewart.

Cathedral of St. John the Divine

New York, New York

Click the play button below to continue tour



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

About

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

Digital Map (Low Bandwidth)



Legend

- Features
- Settlements
- Castle
- Gate
- Tower or Bastion
- City Walls
- ~ Earthwork Features
- Bridge
- Civic
- ~ Selected Urban Plots
- Rows
- Streets
- Chapel
- Church
- Hospital
- Parish church
- Religious house
- ~ Ecclesiastical Precincts
- Intramural City
- River Dee (Late Medieval)
- Parish Boundaries

- Pan
- Zoom In
- Zoom Out

Map scale: 1: 5905

Click x,y: 340610.416400, 366120.833300

Map Extent: 339943.7496 365620.8332 341277.0832 366620.8334

“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 Trick, 2005

Introduction

Overview

Atlas

Sources

Data copyright © Dr Keith Lilley, Chris Lloyd, Steve Trick unless otherwise stated



Arts & Humanities
Research Council

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Belfast



Ylfrgell Genedlaethol Cymru
The National Library of Wales
Aberystwyth

The Atlas

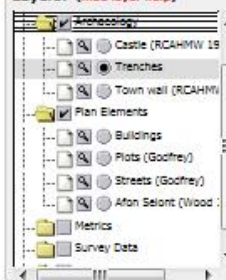
Caernarfon | [Interactive Map](#) | [Discussion](#) | [Downloads](#)

CAERNARFON (Llanbeblig), 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/41,800m ² (excluding castle)
Overall dimensions of walled town (c.1300):	600 feet (High Street)/740 feet (Castle Street/Market Street) (183m/226m)

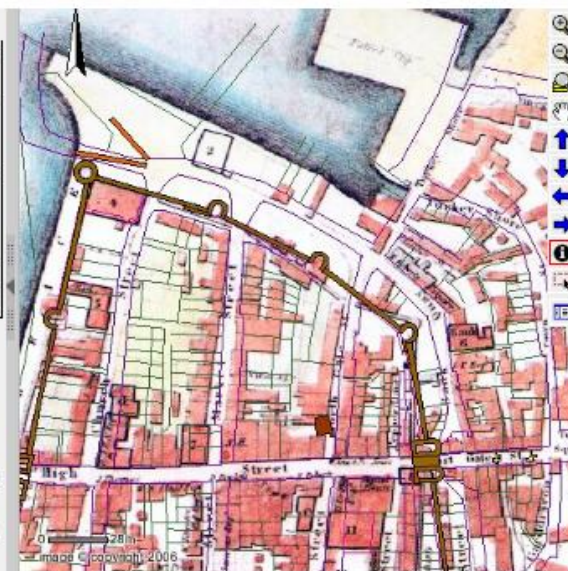
Interactive Map:

Layers: [\(hide layer help\)](#)



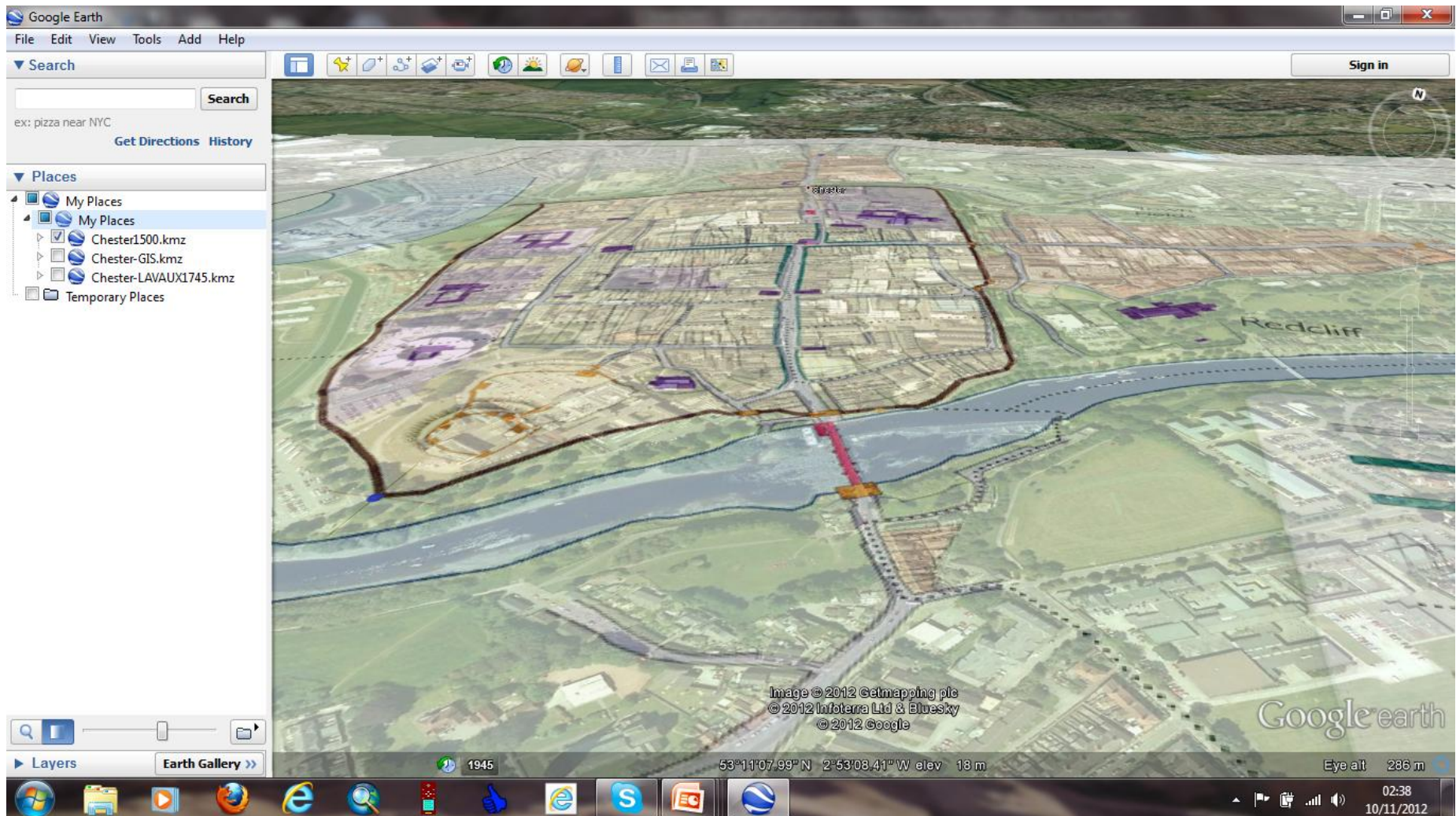
Layer Help:

- A closed group, click to open.
- An open group, click to close.
- A map layer.
- A hidden group/layer, click to make visible.
- A visible group, click to hide.
- A partially visible group, click to make visible.
- A visible layer, click to hide.
- An inactive layer, click to make active.
- The active layer.

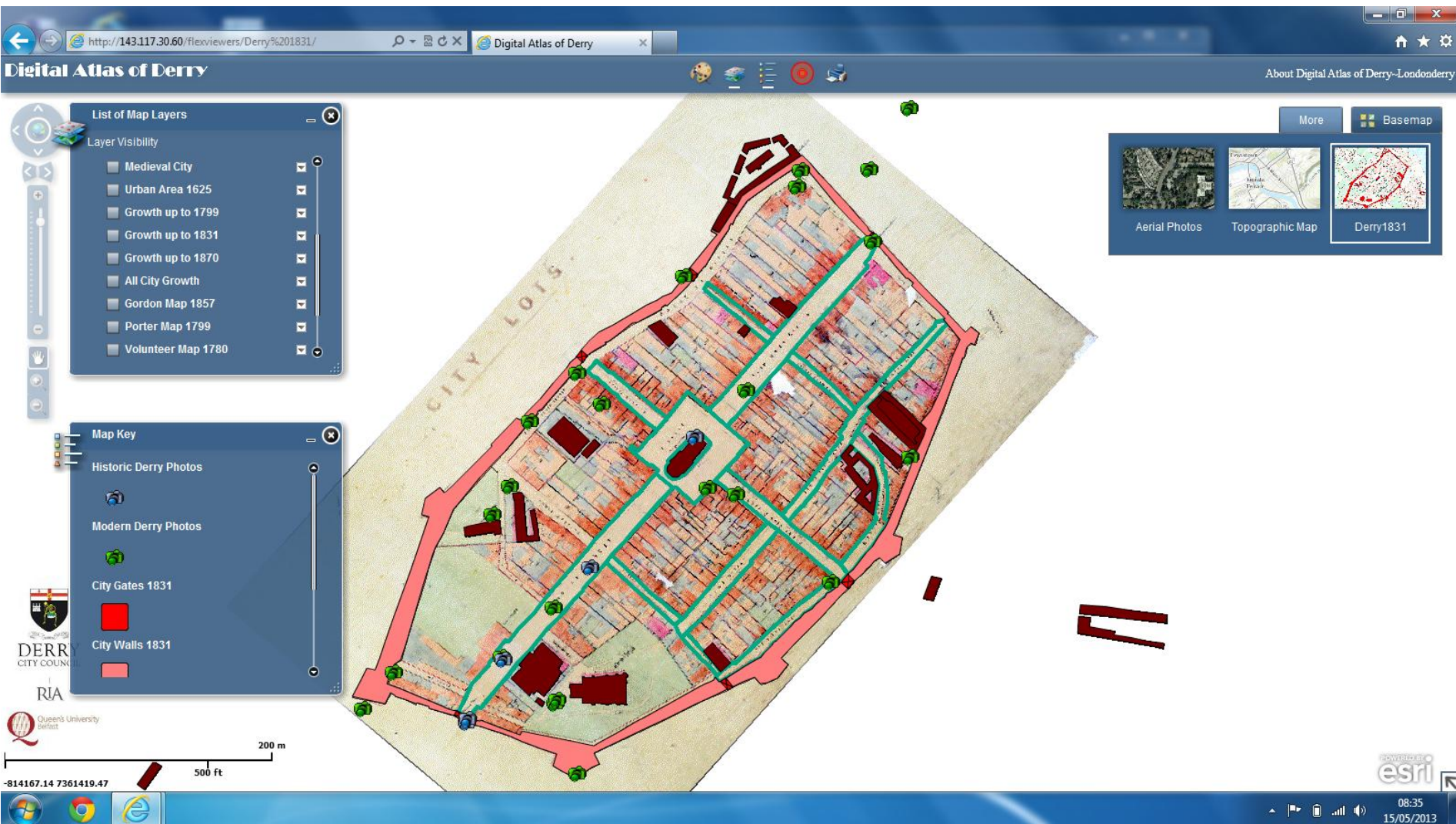


Help for using the Interactive Map

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



“Discover Medieval Chester” AHRC-funded knowledge transfer research project
Overlaying medieval Chester onto Google Earth: ‘Discover medieval Chester’

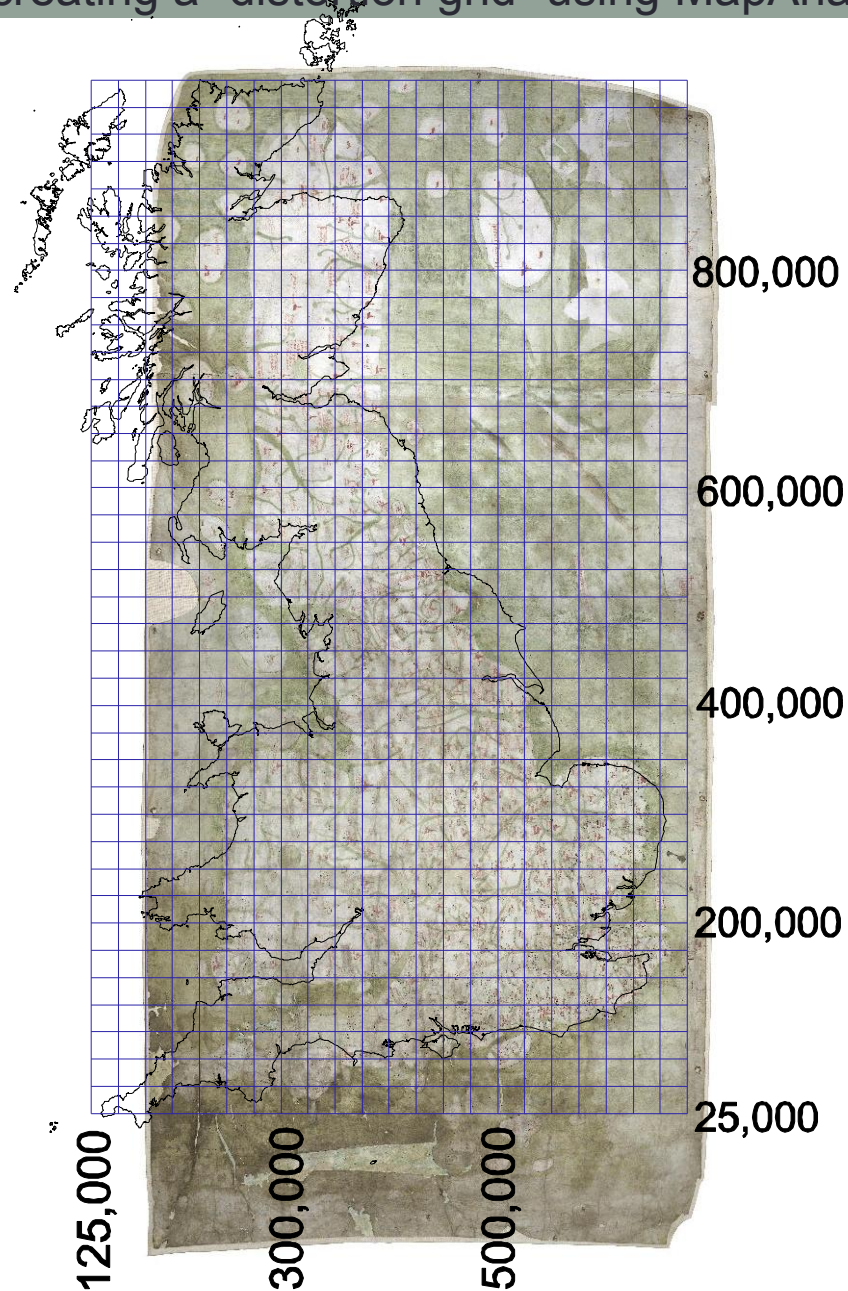
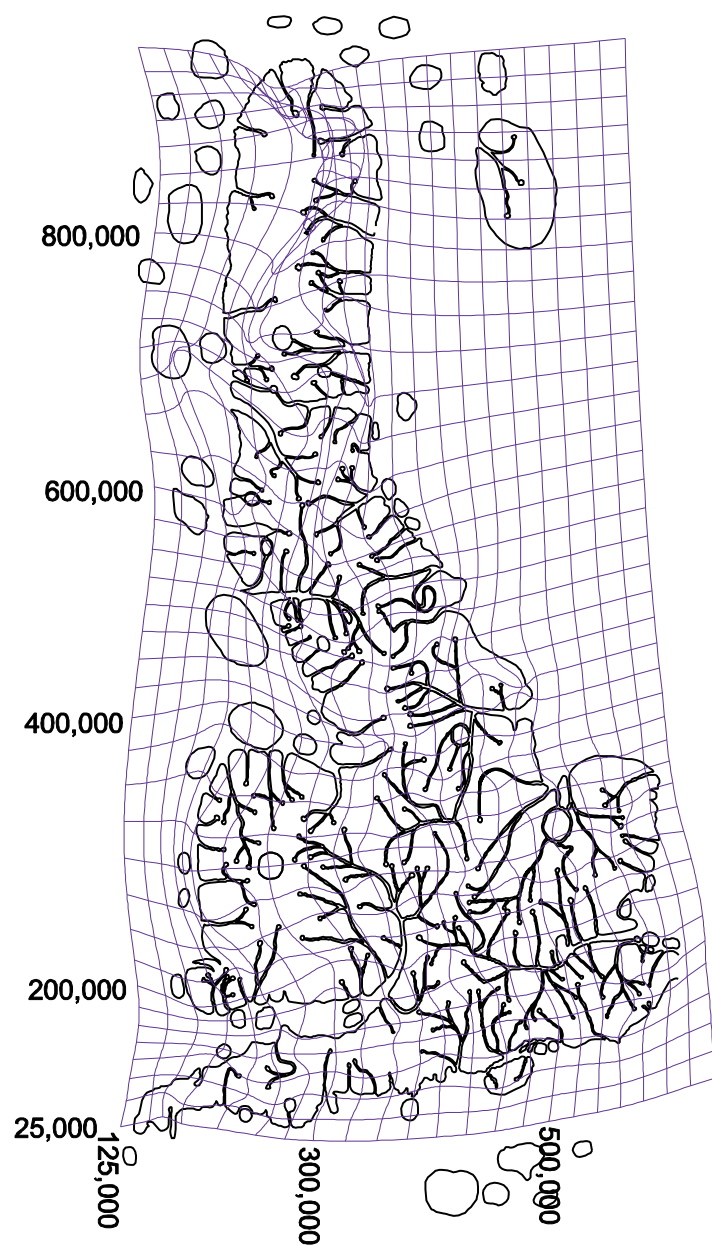


Digital Atlas of Derry/Londonderry (Northern Ireland) -
<http://go.qub.ac.uk/derrycityatlas> - based upon the Irish Historic Towns Atlas (IHTA).

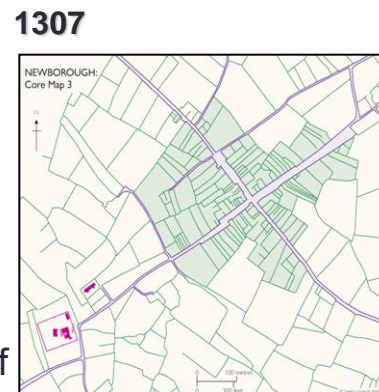
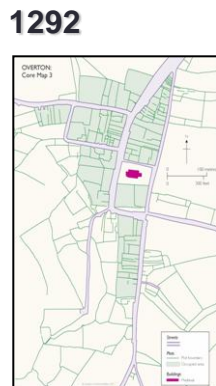
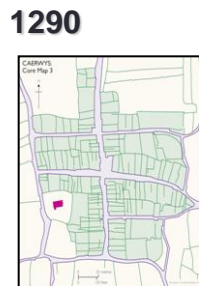
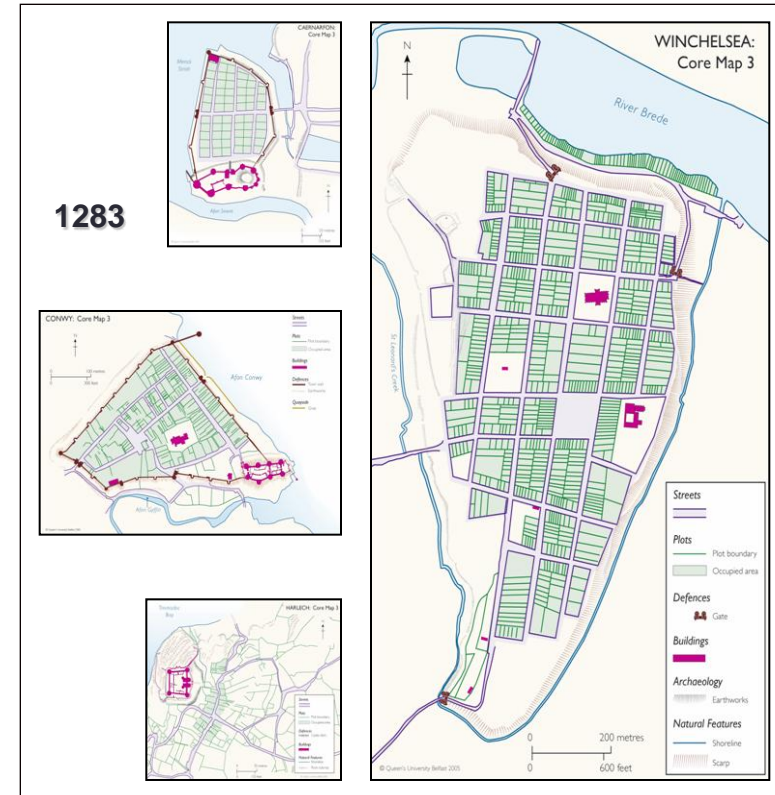
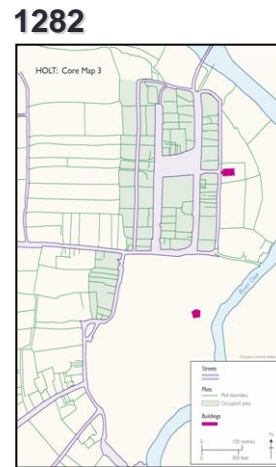
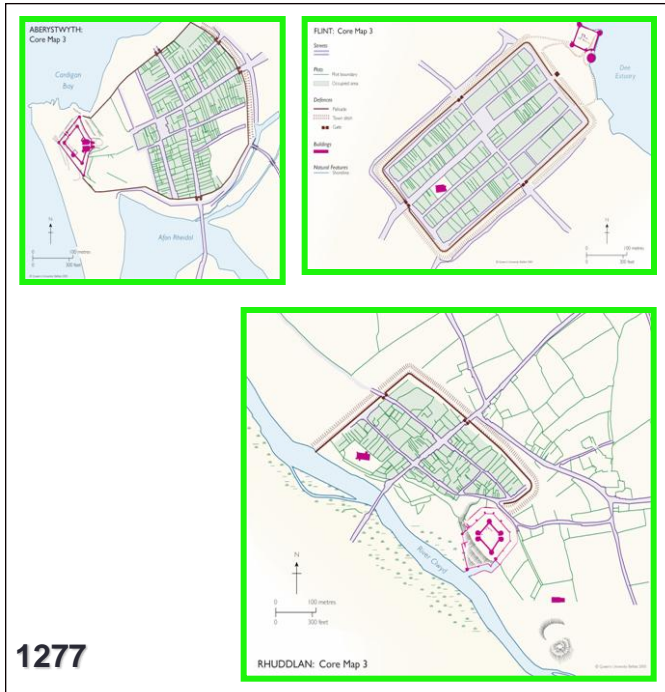
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 - Hidden histories through quantifying qualitative data
 - Comparing patterns and forms across time and space

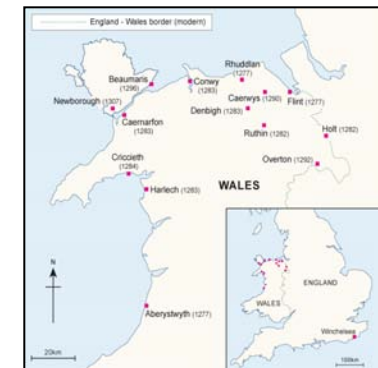
Excavating the Gough Map (c.1370) – creating a “distortion grid” using MapAnalyst



Exploring the design and planning of medieval urban landscapes: Edward I's 'new towns' and the conquest of Wales, 1277-1307

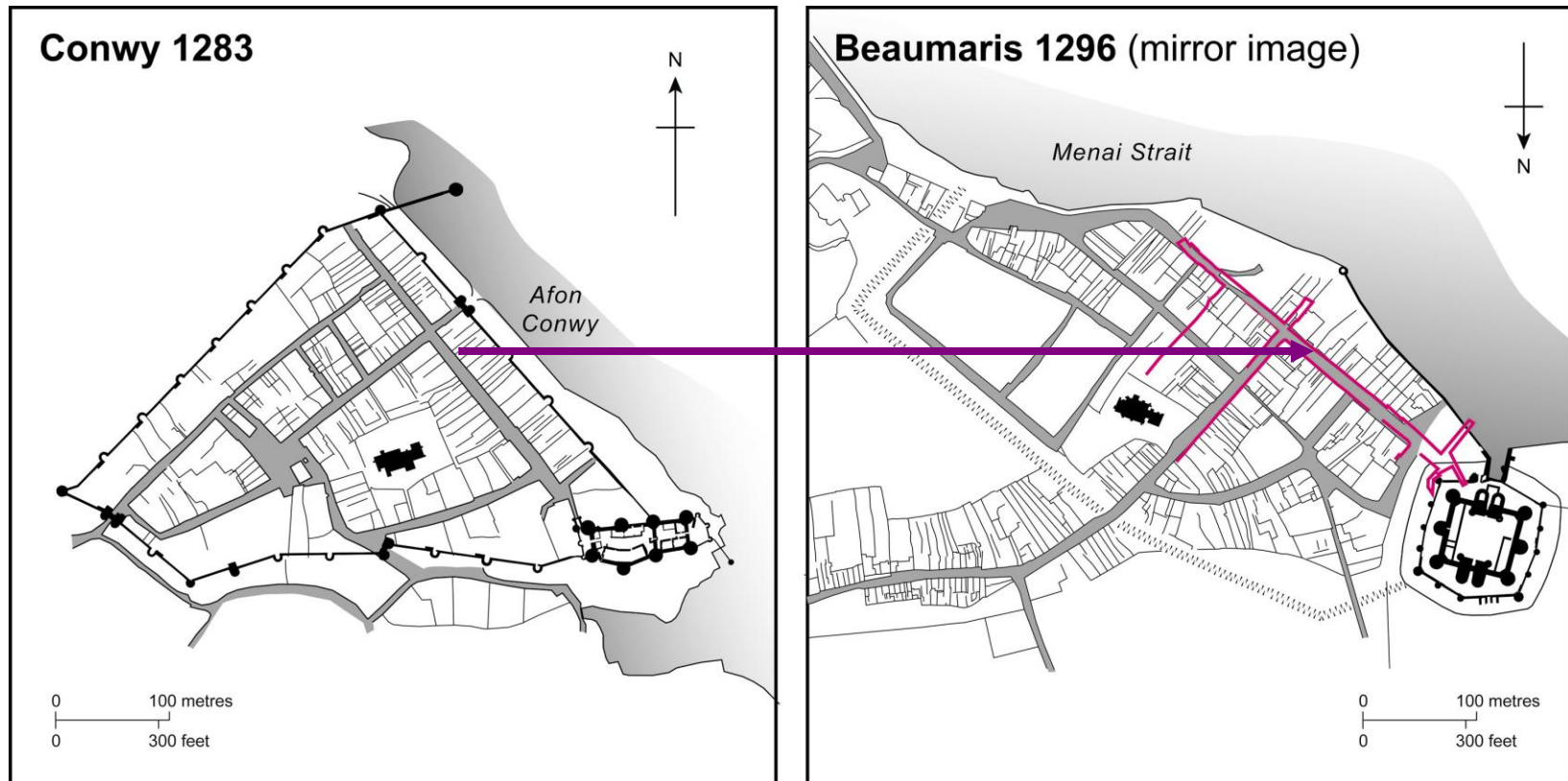


Location Map



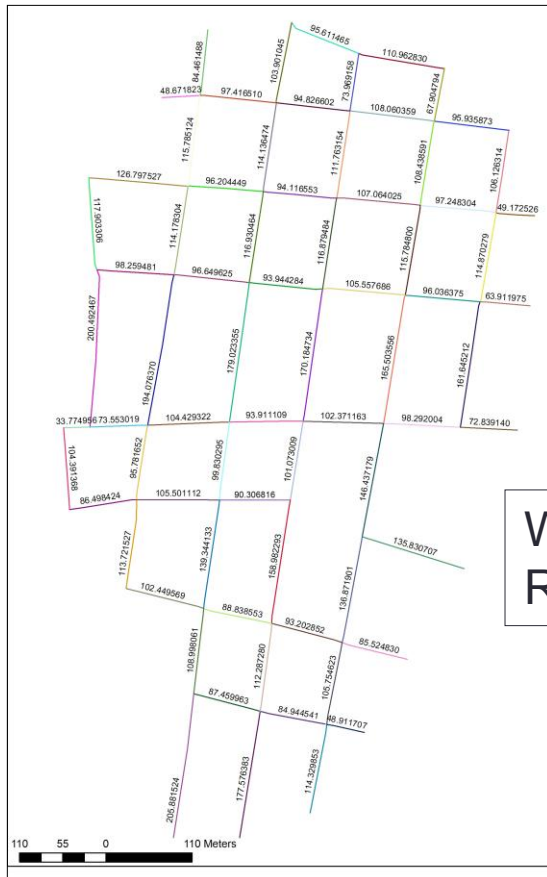
See Lilley K D, Lloyd C, and Trick S 'Designs and designers of medieval 'new towns' in Wales', *Antiquity* 81 (2007), 279-93

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



See Lilley K D, 'Mapping futures? Spatial technologies and the medieval city – a critical cartography', *Post-Classical Archaeologies* 2 (2012), pp.227-254

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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