ChartEx: Discovering spatial descriptions and relationships in medieval charters

Centre for Digital Humanities, University of York

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www.chartex.org
Programme Overview
www.diggingintodata.org

• DIGGING INTO DATA CHALLENGE 2012-13

• “As the world becomes increasingly digital, new techniques will be needed to search, analyze, and understand these everyday materials. Digging into Data challenges the research community to help create the new research infrastructure for 21st century scholarship.”

• UK: AHRC, ESRC, JISC
• US: NEH, IMLS, NSF
• CAN: SSHRC
• Netherlands Organisation for Scientific Research
ChartEx Project Team  
www.chartex.org

- **University of York.** History and Human Computer Interaction  
- **University of Brighton.** Natural Language Processing  
- **University of Leiden.** Data Mining  
- **University of Washington.** History, Web Services  
- **University of Toronto.** History and Digital Archives  
- **Columbia University.** History and Digital Libraries

- **Data Repositories:** The National Archives (UK), Borthwick, DEEDS Project U o Toronto, Columbia Digital Humanities

- **Advisory Panel:** various cognate projects
People
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• History: Sarah Rees Jones, Bob Stacey, Adam Kosto, Michael Gervers, Robin Sutherland-Harris, Stefania Perring, Jon Crump
• NLP: Roger Evans, Lynne Cahill
• Data Mining: Arno Knobbe, Marvin Meeng
• HCI: Helen Petrie, Christopher Power, David Swallow
Why Charters?

Stories about people and places

- 408. Grant by Thomas son of Josce goldsmith and citizen of York to his younger son Jeremy of half his land lying in length from Petergate at the churchyard of St. Peter to houses of the prebend of Ampleford and in breadth from Steyngate to land which mag. Simon de Evesham inhabited; paying Thomas and his heirs 1d. or [a pair of] white gloves worth 1 d. at Christmas. Warranty. Seal.


- January 1252 [1252/3].

- SOURCE: VC 3/Vi 326 (161 mm. x 137 mm.)

- ENDORSEMENT: Petergat', Donacio facta vicariis de domo que fuit Thome aurifabri; Simonis Evesham.

- SEAL: Slit.' Hole in MS.

- NOTE: See 403.
Digital Charter Collections


- The National Archives (UK) Ward 2 – abridged English translations (online).

- The Borthwick Institute, Yarburgh Muniments – abridged English translations (online at A2A).

- DEEDS, University of Toronto (Latin charters of English provenance)

- Cluny (Latin charters of French provenance)
ChartEx: Digging with Technology

• Automatically identify key parts of documents and extract/annotate them using natural language processing
• Automatically identify new relationships and knowledge through data mining
• Allow users to explore and understand the information available with user interfaces that support the types of complex tasks professional researchers do
ChartEx architecture

Chart Documents

Data Mining

Analysed documents

Analysed integrated documents

Language processing

Analysed individual documents

Researcher’s workbench
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