Personalisation: CULTURA Case Study

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CULTURA

- Researcher (in the broadest sense)
- Noisy Manuscripts
- Explorative
- 4-phase approach
- User Reflection and Control

User

Content*

Context

Strategy

CS7155 - Personalisation: CULTURA Case Study
From consuming to exploring to contributing
MS 814

CS7155 - Personalisation: CULTURA Case Study
1641 Depositions

- 31 volumes
- ~8,000 depositions
- 19,010 pages
- ~3.5 million words
Sensitive Data

- Depositions, examinations and associated materials, taken between 1641 and 1667, in which men and women of all classes told of their experiences following the outbreak of the rebellion by the Catholic Irish in October, 1641.

- Collected by government-appointed commissioners – essentially for the purpose of ‘Insurance claims’ – laundry lists of losses; plus details of what allegedly happened – massacre, atrocity, military activity, mass killing, rape etc.

- The chief evidence for the contested allegation that the rebellion began with a general massacre of Protestant settlers

- The 1641 ‘massacres’ have played a key role in creating and sustaining a collective Protestant/British identity in the province of Ulster.
“that one whoe was a Scochman pinched with extreame hunger privately in the night tyme
opened the grave of a man that was buried within the liberties of the Castle and fed ypon the dead
and buried mans flesh Some of the souldiers of the Castle partly esprying him tooke ayme &
thincking him an enemy shott him through soe that he dyed, And that [Marginalia:symbol]
Scochmans wife afterwards hanged to death her owne child
and eate her flesh for want of meate”

MS 814, County Offaly (King’s County)
Deposition of Joseph Joice, who gave details of cannibalism that occurred in that county.
CULTURA

• Partners
  • Trinity College Dublin
    • KDEG/ADAPT – School of Computer Science and Statistics
    • Department of History
  • IBM Haifa, Israel
  • Sofia University
  • Commetric
  • University of Padua
  • Technical University Graz
  • Pintail
CULTURA

• **CULTivating Understanding and Research through Adaptivity**
• FP7 Call 6 STREP (Specific Targeted Research Project)
• €3.9 Million
• Trinity College Dublin are the Co-ordinating Partner
• Feb 2011 – Feb 2014
Objectives

CULTURA will provide innovative adaptive services and an interactive user environment which dynamically tailor the:

- Investigation
- Comprehension
- Enrichment

of digital humanities artefacts.

The CULTURA adaptive environment will:

- adapt to the digital artefacts
- the interests and activities of the wider communities experiencing these collections

CULTURA will provide:

- unprecedented access to, and enriched experience of, large bodies of humanities material.
- return on the high investment already made in large-scale digitisation by many libraries, universities and other memory institutions.
Target Audience

CULTURA will stimulate and support the communities of interest which form around digital humanities collections. These communities include a diverse mixture of:

- **professional** researchers
- apprentice investigators (e.g. students of culture and history)
- informed users (e.g. Users belonging to relevant societies or interest groups, cultural or authorities)
- members of the general public (both adults and children) with diverse interests and motivations.

CULTURA will be validated and evaluated by representative communities formed around contrasting, high-impact, multi-cultural heritage collections in different languages.
Continuum of Experience

- General Public
- Special Interest Groups
- Apprentice Investigators
- Professional Researchers

CS7ISS - Personalisation: CULTURA Case Study
Seven Work Packages

• User and Community Research
• Natural Language Processing
• Social Network Analysis
• Adaptive Services and CULTURA Environment
• Evaluation and Validation
• Dissemination and Exploitation
• Project Management
Two Content Collections
Anne Booth of Littlegreene parish of Drummully wife to James Booth of the same Tailor now one of his maiesties soouldiers goune for Drogheda under the commaund of Captaine Edward Aldrich & duely sworne depositeh that her said husband was Robed, despoyled of all his goods of the five & twentieth day of October last
Anne Booth of Littlegreene parish of Drummully wife to James Booth of the same Tailor nowe one of his maisties soouldiers goune for Drogheda under the commaund of Captaine Edward Aldrich & duely sworne deposereth that her said husband was Robed, despoyled of all his goods of the five & twentieth day of October last.
Normalisation of ‘Dirty Data’

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\]

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\text{trait:0.95} \quad \text{rel:0.9} \quad \text{na:0.8} \quad \text{err:0.7} \quad \text{out:0.8} \quad \text{rel:0.85} \quad \text{lie:0.75}
\]

\[
\text{(traitorously 0.8, traitorous 0.05...)}
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CS7155 - Personalisation: CULTURA Case Study
Entity Extraction
Social Network Analysis

• Two Communities Involved
  • Historical Researchers
  • Participants in, and Contemporaries of, the 1641 rebellion

• Analysis of the Research Portal Community
  • Identification of Influential Researchers in the area
  • Identification of Possible Groups for Collaboration
  • Aid Self-Moderation/Evolution of Community

• Analysis of the Depositions Community
  • The 1641 Depositions contain references to people, places and events
  • SNA can enable researchers to recreate the communities living in Ireland during the 1640s and analyze their social, religious, cultural, economic and military interactions over time and place
Influencer Analysis

Discover what issues are invading an industry or company space. Benchmark prominence and influencer types driving media.

RETAIL INDUSTRY: KEY ISSUES

MONITOR

SINGLE MESSAGE

MULTIPLE MESSAGES

ENGAGE

Food Waste

Plastic Bags

Carbon Trading

Green Chemistry

Renewable Energy

Green Washing

Eco Labelling

Green Policy

Distribution & Delivery

M&S 38%

Positively articles 25%

Neutral articles 12%

Positive to neutral 12%

Neutral to negative 4%

Negative 8%

Tesco 23%

Sainsbury’s 17%

Morrison’s 12%

Positive sentiment

Positive to neutral sentiment

Neutral sentiment

Neutral to negative sentiment

Negative sentiment
Influencer Analysis

• Analyses each domain to calculate the individuals, organizations, topics and reporters most central to the conversation.
• Cluster influencers around topics, points of view or sentiment.
• Used by Organisations to:
  • Marginalise Critics
  • Grow Endorsers
  • Move Neutrals to become Endorsers
Adaptive Research Portal

• Interactive Research Environment
  • Personalised Content Presentation, Exploration and Retrieval
    • Based on Implicit or Explicit User Information
    • Tailoring the Investigation Comprehension and Enrichment of digital humanities artefacts.

• The Research Portal will adapt to:
  • the digital artefacts being examined
  • the interests and activities of the individuals and communities experiencing these collections
Four-phase Personalisation Approach

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Personalised Research Environment
Explore (Continuously Model Interests)

- Search
- Normalised Search
- Entity-based Exploration
Support (provided in a Non-Invasive Manner)

On-the-side Personalised Recommendations

Recommended Depositions

More about Lismore:
Deposition of John Pepper
Deposition of John Smith
Deposition of William Needs & John Laffane

More about Trim:
Deposition of Thomas Hugines
Deposition of Hugh Morison
Deposition of Richard Thurbane

More about Meath:
Deposition of Jane Hanlan
Deposition of Elizens Shellie
Deposition of Richard Ryves
Guide (with Tailored Lesson Plan)

Personalised Narratives

Lesson Block
The aims of the Irish rebels
One of the early leaders of the rebellion was Lord Conor Maguire. He led an armed force to Dublin in an unsuccessful attempt to take the castle there. According to Thomas Walker a near neighbour of Maguire, what were the rebels’ aims?

4 of 5

See extra resource related to “The aims of the Irish rebels”

Change Lesson

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Reflect (Control and Discover)

• Self-reflection
• Self-regulation
• Serendipity
Summary

- Self-reflection of key importance
  - Facilitates autonomy and control
- Adaptivity across many tools
  - Four-phase approach
- Support a continuum of user experience
- Leveraging analytics from content
What we covered today

Case Study: CULTURA
Further Reading

Questions?
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