Library’s role in UP’s Digital Humanities (DH) endeavour

Department of Library Services

Feedback by Johann van Wyk, 25 May 2017
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<th>Objective</th>
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<td>Report on DH</td>
<td>Investigate the Library’s role in UP’s Digital Humanities (DH) endeavour by doing a literature study on:</td>
<td>Report completed</td>
<td>30 Nov 2016</td>
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Project Plan (Literature Study)

- What is meant by Digital Humanities Internationally
- What are academic libraries doing with regard to Digital Humanities
- How does Digital Humanities Link-up with eResearch and Library Carpentry
- How are UP seeing Digital Humanities
- How can UP Library Services facilitate Digital Humanities
What is meant by Digital Humanities?

- Various definitions and viewpoints on what Digital Humanities is.
- Digital Humanities originated from the field of Humanities Computing.
- The field of Digital Humanities can be found at the intersection of computing and the disciplines of the humanities.
- A distinctive characteristic of digital humanities is its nurturing of a two-way relationship between the humanities and the digital. Technology is used to do humanities research, but technology is also subjected to humanistic questioning and interrogation (Wikipedia)
What is meant by Digital Humanities?

DH entails activities beyond the process of digitisation (Roux, 2016):

• creation and use of applicable software tools;
• analysis and interpretation of digital data;
• visual representation of digital data and results; and
• predictions based on results (Roux, 2016)
19th Century
Hypothesis that word frequency in a text might give clues about who wrote it – could not be tested

Late 1940s
1st initiatives - humanities engage with networks and computation (Burdick et al., 2012:8), e.g. concordance of the works of Thomas Aquinas – IBM – Index of every word used by Aquinas

1960s
Computer technology had progressed substantially – several digital concordance projects undertaken
Historical Development of Digital Humanities

1962
19th Century hypothesis about determining authorship by means of word frequency proven true through use of computers

Early 1970s
Models inspire archival projects – e.g. Oxford University Text Archive. (Andrews, 2016: 2, Burdick et al., 2012: 8)

1980s
Advent of personal computer – marked increase in transcription and encoding of texts – launch of Text Encoding Initiative in 1988 – field of Humanities Computing
Late 1980s Development of DH starts gaining momentum, by developing, critiquing, and disseminating methods to structure humanities data that could interface effectively with computation (Burdick et al, 2012: 8).

1990s
Field dominated by electronic scholarly editions of texts (Andrews, 2016: 3)

End of 2002
The term ‘Humanities Computing’ found too limiting (Andrews, 2016: 3) – new name Digital Humanities
- shift from emphasis on computing as analysis, toward a focus on digital publication, digital media, and critical reflection on digital culture
2004: 1st Publication on DH: The Blackwell Companion to the Digital Humanities
DH related projects in South Africa

(From presentation by Justus Roux at Simposium: All about Me: digital humanities and representation of self, held on 17 June 2016 at University of Pretoria)

- Various digitisation projects across many disciplines for many years: digital speech processing etc.
- **Beyers Naude (Theology) project**: Stellenbosch University
  ([http://wiser.wits.ac.za/page//new-research-projects-11029](http://wiser.wits.ac.za/page//new-research-projects-11029))
- **Digital Innovation South Africa (DISA 1, 2)** - University of KwaZulu-Natal
  ([http://www.disa.ukzn.ac.za](http://www.disa.ukzn.ac.za)) SA history, politics, gender, literature, economics, human rights, urban struggles
- **Digitisation, history and the making of a post-colonial archive**: University of the Western Cape
DH related projects in South Africa

- **Historical Papers - WITS** ([http://www.historicalpapers.wits.ac.za](http://www.historicalpapers.wits.ac.za))
  Largest non-state archive in South Africa

- **International Library of African Music (ILAM)**
  – Rhodes University, Grahamstown ([http://www.ru.ac.za](http://www.ru.ac.za))


- **Soweto Historical GIS Project** ([http://www.dhinitiative.org/projects](http://www.dhinitiative.org/projects))

- **Language Resource Management Agency** – NWU ([http://www.rma.nwu.ac.za](http://www.rma.nwu.ac.za))
Slow uptake in SA compared to international practice

2014:
1st local awareness campaign (with international guest) and a weekly discussion by Research Unit for Literature and Languages in SA context at NWU

2015:
1st DH Workshop SA (23-25 February)
NWU (Potchefstroom)

2016:
2nd DH Workshop SA (4-8 April)
NWU (Potchefstroom) - Founding of Digital Humanities Association of Southern Africa (DHASA) as a forum – (http://digitalhumanities.org.za/)

2017:
Inaugural Conference of DHASA held 17-20 Jan 2017 at Stellenbosch University (http://dh2017.digitialhumanities.org.za/)

National DH activities in South Africa
What are academic libraries doing with regard to DH?

- **DH Centres or Programmes**
  - A number of libraries have dedicated DH Centres or programmes — many of these in different developmental stages. **Staffing** of these centres are often confined to a digital scholarship librarian (who fulfils other roles) and a few IT professionals (many working on contract or grant funded projects, or have other responsibilities beyond DH programmes).

- **Typical DH Services**
  - Digitisation – providing wide access to cultural information/materials
  - Manipulation of data flowing from cultural information
  - Offer a website focusing on DH
What are academic libraries doing with regard to DH?

- **Typical DH Services (Continued)**
  - Develop tools for **preserving and archiving** of digitally-born artifacts of recent and contemporary cultural heritage
  - Support **curation and publication of data** that contributes to improved methodologies for the organisation and stewardship of humanities research
  - Create frameworks to enable the development of new methods and tools for **exploration and visualisation** of digital materials and data
  - **Text analysis** and **electronic text encoding**, as well as **image analytics** for cultural heritage collections
  - Provision of **text-mining tools**
  - Provision of **3D environments**
  - Provision of **Online Exhibitions**
  - Use **social media technologies**
What are academic libraries doing with regard to DH?

- **Typical DH Services (Continued)**
  - Provision of [creative environment](#) (space that encourages innovation and testing – where researchers can create, develop and test)
  - Some DH Centres have [makerspaces](#) incorporated in them, e.g. ScholarsLab at University of Virginia
  - Provision of a [tool](#) for adding [layers of meaning](#) to [map](#) (GIS)
  - [Training](#) on various software and hardware tools (e.g. Data, Software and Library Carpentry)
What are academic libraries doing with regard to DH?

Skills development for librarians in DH

Online sources:

- Coursera (https://www.coursera.org/)
- Codeacademy (https://www.codecademy.com/)
- Programming Historian (http://programminghistorian.org/) – Software Carpentry for Digital Humanities
Insufficient formal training opportunities
Lack of institutional commitment
Lack of support for library-conceived initiatives
Lack of time
Overcautiousness
Lack of incentive
Complexity of collaboration with academics
Inflexible infrastructure
Lack of authority to marshal appropriate resources
Diffusion of effort
Lack of institutional commitment
Lack of support for library-conceived initiatives
Lack of time
Overcautiousness
Lack of incentive
Complexity of collaboration with academics
Inflexible infrastructure
Lack of authority to marshal appropriate resources
Diffusion of effort
How does Digital Humanities link-up with eResearch and Library Carpentry

- There is a natural overlap between DH and Library Carpentry and eResearch. This can be seen in the number of Library/Software Carpentry workshops that are geared towards training of library staff and researchers in coding skills for DH

- Examples of Library/Software Carpentry workshops for DH:
  - Using Git, Github
  - Cleaning data with OpenRefine,
  - Getting started with Markdown
  - Editing audio with Audacity
  - Counting and mining data with Unix
  - R basics with tabular data
  - For more examples see [http://programminghistorian.org/lessons/](http://programminghistorian.org/lessons/)
DH at UP

- Seminar: All about me: Digital Humanities and Representations of Self, held 17-18 June 2016, University of Pretoria

http://www.up.ac.za/media/shared/1/ZP_Files/itenary_4-june.zp90690.pdf
Potential projects in Faculty of Humanities that could be supported

• Capital Cities IRT
  – Sub Theme: Cities Lived: Movements, Exchanges, Memories and Histories of the Present

• Visual Technologies: Critical Encounters FRT

• Scientific e-lexicography for Africa (DAAD funded) (Department of African Languages)
  – Aim of the project is the preparation of electronic dictionaries for Southern Africa
How can UP Library Services potentially facilitate DH?

• Establish a DH Centre or programme
• Staffing:
  – Allocate a staff member(s) to fulfil the role of digital humanities librarian (Upskilling?)
  – Allocate IT professional(s) to support such a service (Upskilling?)
• Identify which of the DH services mentioned earlier are already performed by staff in the library and determine how these can be co-opted to render support for a DH service
• Determine which of the tools and technologies mentioned under DH services are already available and which should be acquired
• Identify tools and technologies and software will need to be added
• Present Library/Data Carpentry workshops to library staff and researchers
• Link this project to outcomes of Project: Digital Humanities & Special Collections and Digitisation?