Citizen Science in the context of recent Digital Humanities projects – an overview and outlook

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Citizen Science in Digital Humanities (DH)

Overview

Evaluation and analysis of recent DH projects and studies concerning Citizen Science

Outlook

Citizen Science in - expectations and possibilities

Citizen Science in Digital Humanities

Overview – evaluation of **32** recent projects and studies

- DH2015   (Digital Humanities)   [24]
- DHd2015   (Digitial Humanities im deutschsprachigen Raum)   [4]
- Dhb3 2015 (Digital Humanities in Berlin)   [3]
- other [1]

Citizen Science in Digital Humanities

Overview – evaluation topics

- lexicography
- visualisation
- infrastructure
- citizen science

Citizen Science in Digital Humanities

- 9 out of 32 projects contain CS elements

Mode of CS integration
I.   interactive use of social media (facebook, twitter, flickr)
II. crowdsourcing → nichesourcing]
III. apps
IV. collective annotation

Interactive Use of Social Media

Travis, C. (2015) A Digital Humanities GIS Ontology: Tweetflickertubing James Joyce's "Ulysses" (1922). DH2015.

Figure 2. Live social media map integrated with the Linati schema geo-database.

• Social Media-Geographical Information System mapping of Bloomsday (annual celebration of Joyce's novel Ulysses)

• map Tweets from *Twitter*, and postings from *Flickr* and *Youtube* locally (Dublin) and globally (Europe, the Middle East, Asia, Australia-Pacific, North and Latin America) to specific locations from the novel

• surveys taken on social media activity on Bloomsday: highest activity around Davey Byrne's Pub and Martellow Tower.
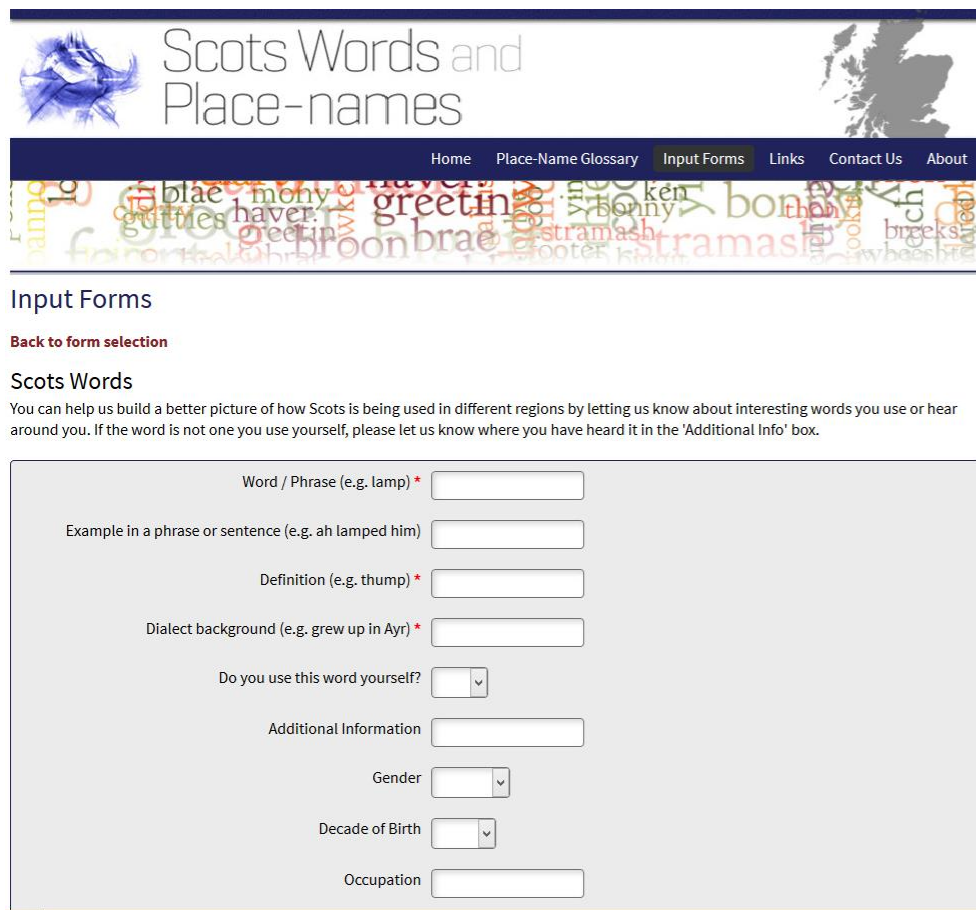
• surveys taken on social media activity before and after the event: *Flickr* and *YouTube* posts exhibited the highest activity in Dublin outside of Bloomsday → digital eco-system maintains a virtual Joycean Dublin on a sustained basis.

Interactive Use of Social Media

Scots words and place-names (SWAP) project (cf. Hough, C. et al.)

Scots Words and Place-names

Home   Place-Name Glossary   Input Forms   Links   Contact Us   About

Input Forms

Back to form selection

Scots Words

You can help us build a better picture of how Scots is being used in different regions by letting us know about interesting words you use or hear around you. If the word is not one you use yourself, please let us know where you have heard it in the 'Additional Info' box.

Word / Phrase (e.g. lamp) *	
Example in a phrase or sentence (e.g. ah lamped him)	
Definition (e.g. thump) *	
Dialect background (e.g. grew up in Ayr) *	
Do you use this word yourself?	
Additional Information	
Gender	
Decade of Birth	
Occupation	

- SWAP project - Scots Words And Place Names

- Aim: engage the Scottish public in talking about the Scots words they use and hear around them

- collect information on names of places which use Scots words: how they were pronounced; if people knew what they meant; whether they appeared on maps or were known through word-of-mouth; even how they looked (through uploading pictures).

- use of Facebook and Twitter to collect data and build communities

- social media as a fast, broad-reaching and efficient medium for engaging the general public

- collected words were added to collections of Scottish Language Dictionaries and to a comprehensive online glossary of Scots place-names

Crowdsourcing/Nichesourcing

Hakkarainen, JP (2015) Nichesourcing The Uralic Languages For The Benefit Of Linguistic Research And Lingual Societies. DH2015.

- Project: digitisation of monographs and newspapers for endangered Uralic languages

- citizen science as a means of integrating the language community in linguistic research

- '**nichesourcing**' – distributing tasks among small groups → better for qualitative than quantitative results

- Typical CS task: edit and collect word for fields of vocabularies where researchers require more information → by means of an OCR editor

Crowdsourcing/Nichesourcing

Voss et al (2015) From Crowdsourcing to Knowledge Communities: Creating Meaningful Scholarship Through Digital Collaboration. DH2015.

- Description of different approaches and communities across 3 projects

- Distinction between '**crowd**' → perform autonomous, simple tasks and '**knowledge communities**' → require collaboration, coordination and a more social element

- engaged 3 different types of crowds: the general public ; the expert community and the paid community .

- All 3 were only partially successful in terms of the research questions initially posed

Apps

Gray, S. J. (2015) Textal: Unstructured Text Analysis Workflows Through Interactive Smartphone Visualisations. DH2015
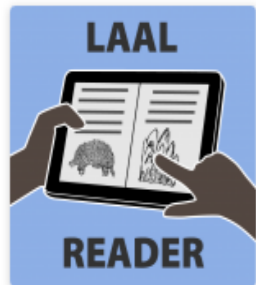

Figure 2. Textal iOS Application main screen, word cloud visualisation showing underlying statistics.

• understand how users analyse text through mobile devices

• visual style: word clouds

• allows users to explore data behind the word cloud by touching individual words

• brings together tools and workflows for use by researchers to analyse unstructured text as well as giving the general public a tool to easily create word clouds.

• insights gained from the usage data of the application's global user base and the textual data crowdsourced from users of the application.

Apps

Bow, C. (2015) Bringing to life the Living Archive of Aboriginal Languages. DH2015.

Reader App

UPDATED VERSION AVAILABLE – DEC 2015!

Ever wanted to read LAAL books when you're not online? Or save a set of books to your own device?

We've developed a mobile app to allow users to download items from the Living Archive directly to a mobile device. This is ideal for users who want to store all their stories on their phone or tablet to use when they're not connected to the Internet.
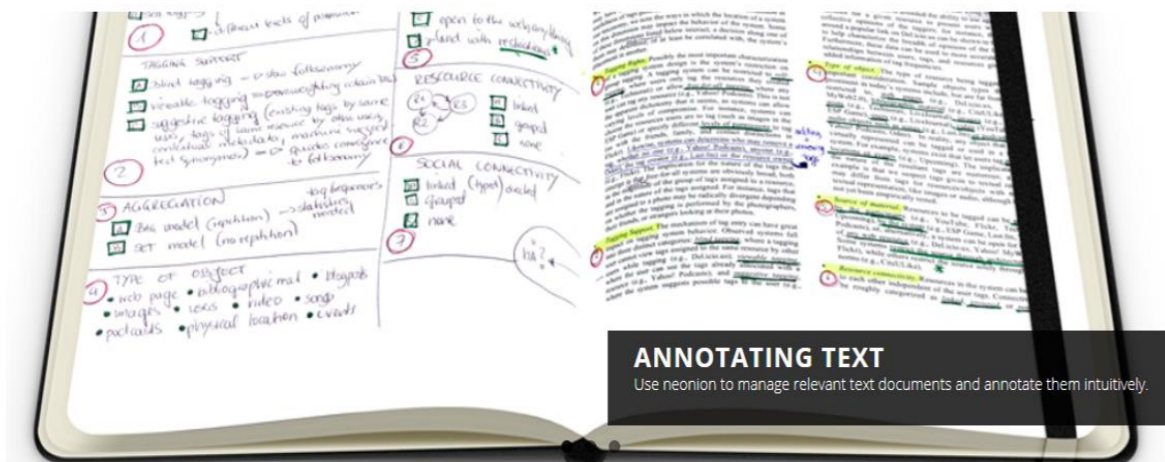
The app is available now for Android on Google Play, and for iOS on iTunes.

• online archive of Indigenous Aboriginal languages

• wealth of written and illustrated texts in endangered languages

• browse and search interface by language and location

• bulk download and offline acces through mobile app

• schools use app to create libraries on iPad's of sources in local languages

• social media to engage different users in schools , remote communities and academic contexts.

Collaborative Annotation

Claudia Müller-Birn et al. (2015) neonion - kollaboratives, semantisches Annotieren von Dokumenten als Mehrwert für das Forschen in den Geisteswissenschaften und der Informatik (*neonion – collaborative, semantic annotation of documents for reserach in the humanities and informatics*). Dhd2015.

ANNOTATING TEXT
Use neonion to manage relevant text documents and annotate them intuitively.

Collaborative Semantic Annotations

neonion is a user-centered, web application for the collaborative annotation of texts developed at the Human-Centered Computing group at Freie Universität Berlin.

annotation tasks effectiv, efficient, and satisfying.

At the moment, neonion is developed together with scholars from the Humanities (esp.

- active scholarly reading involves annotating text with comments, highlights or underlining.

- increased reading online – annotate digital sources

- mixed-initiative annotation – by users and automated services

Citizen Science in Digital Humanities

Summary

Mode of CS integration
I.   interactive use of social media (facebook, twitter,flickr)   [2]
II. crowdsourcing → nichesourcing   [2]
III. apps   [3]
IV. collective annotation   [1]

Citizen Science in Digital Humanities (DH)

Overview
Evaluation and analysis of recent DH projects and examples concerning Citizen Science

Outlook

Citizen Science in - expectations and possibilities

Citizen Science in Digital Humanities
Outlook

- current digital humanities project and the Austrian Academy of Siences

- basis: vast collection of dialect words (~2.5 million entries) from the Bavarian dialects in region of the former Austro-Hungarian monarchy

- multi-faceted:
  elexicography | infrastructure | visualisation | citizen science

Citizen Science in Digital Humanities
Outlook

Citizen Science in exploreAT!

- putting together specilised focus groups

- thematic topics: bread & pastries, colours

Citizen Science in DH Outlook

Citizen Science in exploreAT!

- bread → concepts: different types of bread (Schwarz-, Grau-, Weißbrot)

- colours → concepts: historic vs current (social tagging)
  (*allrot* vs *zinoberrot)*

Citizen Science in DH **Outlook**

Citizen Science in exploreAT!

Considerations
- effective ways of integrating CS in exploreAT! ?
- most practical way of contributions?

- citizens as possible addressees of scientific output
- collecting experiences (+/-) with CS from other projects

Thank you for your attention!

... time for questions, comments, suggestions....

References

Bow, C. (2015). Bringing to life the Living Archive of Aboriginal Languages. Paper presented at the DH2015, Sydney, Australia.

Gray, S. J., Terras, M., Ammann, R., & Hudson-Smith, A. (2015). Textal: Unstructured Textg Analysis Workflows Through Interactive Smartphone Visualisations. Paper presented at the DH2015, Sydney, Australia.

Hakkarainen, J.-P. (2015). Nichesourcing The Uralic Languages For The Benefit Of Linguistic Research And Lingual Societies. Paper presented at the DH2015, Sydney, Australia.

Hough. C. et a. (2011) Scots Words and Place-names: JISC Final report. Project Report. JISC.
Scots words and place-names, from http://swap.nesc.gla.ac.uk/ [accessed 30.03.2016]

Claudia Müller-Birn et al. (2015) neonion - kollaboratives, semantisches Annotieren von Dokumenten als Mehrwert für das Forschen in den Geisteswissenschaften und der Informatik. Dhd 2015, Graz, Austria.

Travis, C. B. (2015). A Digital Humanities GIS Ontology: Tweetflickertubing James Joyce's 'Ulysses' (1922). Paper presented at the DH2015, Sydney, Australia.

Voss, J., Wolfenstein, G., Zypher, F., Heuser, R., Young, K., & Stanhope, N. (2015). From Crowdsourcing to Knowledge Communities: Creating Meaningful Scholarship Through Digital Collaboration. Paper presented at the DH2015, Sydney, AUstralia.