

Digital Humanities 2006: When Two Became Many

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1 Introduction

The First International Conference of the Alliance of Digital Humanities Organizations (ADHO) was special in many ways, not least because it was the first time that the Association for Computers and the Humanities (ACH) and the Association for Literary and Linguistic Computing (ALLC) convened their joint conference under this new name. Held at the Université Paris-Sorbonne, Digital Humanities 2006 (to give it its shorter title) was organized by Liliane Gallet-Blanchard, Marie-Madeleine Martinet and other members of Cultures Anglophones et Technologies de l'Information (CATI). There were 214 participants from twenty-four countries. One hundred and twenty papers and sessions and thirty-one posters were presented.

As with previous ACH/ALLC joint conferences, Digital Humanities 2006 did not have a pre-defined theme. Instead, the Programme Committee (headed by Lisa Lena Opas-Hanninen, University of Joensuu) maintained the well-established tradition of encouraging papers, posters and panels on any aspect of digital humanities, including:

- text analysis, corpora, language processing,
- IT in librarianship and documentation,
- computer-based research in literary, cultural and historical studies,
- computing applications for the arts, architecture and music,
- information design and modelling,
- (the cultural impact of) new media, and
- humanities computing in academic curricula.

Whilst the presentations given at Digital Humanities 2006 confirm that digital humanities work is being undertaken across the whole spectrum of humanities research (broadly defined), a number of areas—namely, (1) literature and linguistics (and, in particular, computational stylistics), (2) computing applications for the arts and architecture, (3) the development of new/evaluation of existing digital resources (especially literary and/or historical) and the ongoing importance of maintaining, managing and preserving such resources—were particularly well represented. In the following sections, I highlight a number of paper/poster presentations that ably represented (1)–(3).

2 The Emergence of an Implicit Theme at the Paris Conference

An additional, if implicit, theme quickly emerged: namely, the challenge of learning to speak the diverse 'languages' of the humanities and ICT disciplines, so that we might better understand each other's needs and/or aspirations. Indeed, the 'call' for more effective cross-disciplinary communication was initially voiced by Tapio Sepannen (University of Oulu) in the opening plenary, *Multimedia Information Retrieval*, and became stronger—and more inter-disciplinary in focus—in the course of the conference (as the 214 attendees were treated to ~150 papers and posters, all of an admirable quality.) For example, Patrick Juola (Duquesne University) suggested that

‘miscommunication’ was a potential problem for researchers within the humanities community as a whole, when he identified a ‘perceived neglect on the part of the broader humanities community’ in respect to Digital Humanities applications. Juola is convinced that this neglect is indicative of a mismatch of expectations between the actual needs of the wider humanities community and what we (within the Digital Humanities community) perceive them to need from the tools we develop. His ‘answer’, at the conference, was to encourage fellow attendees to develop *Killer Applications in Digital Humanities*, which fill a genuine need of the humanities community and, by so doing, create an acceptance of that tool and the supporting methods/results. Papa, Warwick, Terras and Huntington (University College London) also highlighted *The (in)visibility of Digital Humanities Resources in Academic Contexts* in their Paris presentation. However, they suggested that, prior to building more resources, we should first undertake research to determine whether (and if so, how) the hundreds of digital resources/tools that have already been developed are utilized by those outside of the humanities computing community. They have already undertaken a project, entitled LAIRAH, which seeks to analyse user uptake of a number of online digital resources. In a similar vein, Bei Yu and John Unsworth (University of Illinois) highlighted (what they described as) a ‘chicken-and-egg’ dilemma: a need for more collaboration in order to produce tools that are useful to the Humanities scholar against a need for tools that might promote collaboration. As will become clear in the next section, they also went on to suggest that data mining techniques might provide a useful means of determining potential areas of collaboration between the Digital Humanities community and the wider humanities community.

3 Literary and Linguistic Computing

Although there was a diverse range of linguistics-related studies, a number of papers touched upon computational stylistics, in particular. For

example, David Hoover (New York University), in his paper *Stylometry, Chronology and Styles of Henry James*, described ways in which we might use (an amended version of) Burrow’s Delta to determine the evolving style of authors. However, he also suggested that grouping words semantically may offer an additional step towards accurately determining an evolution of style; in particular, style as it relates to characterization. Other Burrows-related presentations included Sterling Stein and Shlomo Argamon’s (Illinois Institute of Technology) *Mathematical Explanation of Burrows’ Delta*.

The nora project was particularly well represented at the conference, with a special session devoted to *Text Mining and Literary Interpretation*. As previously intimated, Yu and Unsworth also debated *Potential Data Mining Applications in Literary Criticism* in an additional presentation. Using Buckland’s (1999) idea that ‘vocabulary is a central concept in information transition between domains’ as their starting point, their approach has been to compare the vocabularies of (and, in particular, the verbs utilized by) ‘data miners’ and ‘literary scholars’, via keyword analysis, from which they hope to identify potential activities that will be of interest to both communities. I cannot help but wonder whether a supplementary product of such work (to be undertaken by members of the nora team and/or others) might be an indication of lexical items that (1) mean different things in the two communities, (2) are unknown to one of the communities, and/or (3) are indicative of different (cultural) worldviews/belief systems. For such work may help bridge any potential ‘miscommunication’ gap(s).

Louisa Connors (University of Newcastle, Australia) is also interested in bridging the gap between different communities: indeed, the primary aim of her presentation was to encourage participants to consider *Combining Cognitive Stylistics and Computational Stylistics*. As such, she echoed both the call for more effective cross-disciplinary communication initially voiced by Sepannen (see above), and the lack of uptake of computational techniques within the more traditional disciplines; in this instance, literary criticism. Connors offered

a way forward for both the greater uptake of computing techniques within the latter and also 'a more interpretive framework [for] computational stylistics' that was extremely thought-provoking: she suggested that we use cognitive linguistics (and the idea of authorial agency that she believes it assumes) as a means of simultaneously debunking the idea of the death of the author (Barthes, 1977) and providing a theoretical justification for a focus on function and form (and, by so doing, justifying computational approaches to literary analysis that were interpretively 'rich').

4 Computing Applications for the Arts and Architecture

There were a small number of presentations relating to computing applications for the arts and architecture. One of the most notable architectural examples was Robert Tavernor's plenary presentation *Visualising 21st Century London*: Tavernor described how London planners are increasingly utilizing visualization methods as a (better) means of representing the urban landscape when assessing (the potential impact of) proposed new developments.

In contrast to Tavernor, Stef Gard, Sam Bucolo and Theodor Wyeld (University of Queensland Australasian CRC for Interaction Design) reported on a virtual project that seeks to integrate key cultural elements in a synthetic environment representative of Australian indigenous groups. Interestingly, cultural differences in perception—relating to the importance of detail when (re-)presenting the landscape—have had to be accounted for when creating this particular virtual environment as a means of ensuring 'contextual accuracy'. I found their approach—that of learning from the Aboriginal people themselves and also revising their usual academic practices of collecting cultural knowledge—a useful reminder of the importance of 'learning to speak one another's language' in a way that takes account of inter-/cross-cultural differences.

An excellent paper relating to the use of computing tools for organizing and accessing history of

art information was given by Nuria Rodríguez Ortega (University of Málaga) and Alejandro Bía and Juan Malonda (University of Miguel Hernández). The presenters initially emphasized a recurring problem within the field of art history (that of terminological and discursive ambiguity/vagueness), and then documented two complementary tools they have developed: The Tesauro Terminológico-Conceptual (TTC) that provides art specialists and other users with a taxonomy of art-related terms and concepts, and a textual database that provides their context-in-use (thus further aiding understanding). Future plans include further developing the textual database so that it becomes 'an exhaustive repository of pictorial and artistic texts that could serve as a basic reference tool for theoretical and critical studies, and, more generally, for research dealing with texts, sources and documents'.

In case participants were of the impression that this is one particular area of Humanities where there has been extensive uptake of digital applications, Martyn Jessop (King's College London) reminded us that 'research opportunities offered by spatial and spatial-temporal data remain relatively unexplored', in spite of being freely available at relatively low cost. His paper at the conference was largely devoted to the factors which he believes are inhibiting meaningful collaboration across disciplines. These factors include weaknesses in existing methodologies, problems associated with knowing about/finding the data that already exists, poor transference of research practices across the disciplines and the problem of encouraging institutions to support researchers, who wish to explore such areas, given the start-up/maintenance costs and a fear that such research may not be deemed to be prestigious enough (in research assessment terms). Jessop suggested that one way forward (in this particular instance) might be the development of a virtual 'one-stop shop', which provides a clear statement of advantages expressed in distinct (humanities-related) research outcomes; a set of sample projects, detailing the methodology used, with suggestions as to how that methodology might be transmitted between disciplines; and links to data sources and 'useful' tools.

The sessions devoted to the Alliance of Digital Humanities Organizations¹ (ADHO) deserve special mention at this point, as they showed an awareness of the importance of disseminating good practice in the Digitized Humanities community whilst also promoting the Digitized Humanities approach to the wider Arts and Humanities communities (and beyond). Indeed, there are plans to use the *Digital Humanities Quarterly* e-journal as a means of attracting a more general audience. The e-journal is an especially useful tool in this regard, as contributors will be able to show 'how' their models work as well as the types of results that are achievable. The new book series, *Topics in Humanities Computing*, may also provide an opportunity for academics from the traditional and digital humanities to explore the same topics from their respective perspectives, with the spin-off potential of highlighting the most effective/useful 'cross-over' points for particular disciplines.

5 Issues Relating to the Development of New/Evaluation of Existing Digital Resources and the Ongoing Importance of Maintaining, Managing and Preserving Resources

The need for the design and implementation of a framework for creating and managing digital resources seems to be a recurrent theme at the ALLC/ACH conferences, and the Digital Humanities 2006 conference was no exception. Several papers raised issues relating to the use of TEI. By way of illustration, Fabio Franceschini and Elena Pierazzo (University of Pisa) reported a study which makes use of lexical entries to analyse the language of young people. Significantly, however, much of their presentation was devoted to the difficulties of finding suitable storage and retrieval solutions for their material (i.e. questionnaires and word lists, which trace innovative forms to their relevant lemmas). In particular, they highlighted the

problems they had encountered when using the TEI Terminological Databases tag set and their justification for opting for a relational database structure (which they call BaDaLi). Claire Carline, Eric Haswell and Martin Holmes (University of Victoria) also highlighted problems they had experienced when using TEI and SVG to annotate verse and prose polemics (relating to seventeenth-century French engravings). Nonetheless, they were careful to point out the overall benefits of a scheme (like TEI) which 'encourages customization of its guidelines to accommodate [...] a wide range of implementations'. Syd Bauman (Brown University) and Lou Burnard (Oxford University) also informed participants of what they can expect from the newly released TEI P5, in their paper: *TEI P5: What's in It for Me?*

It was gratifying to see that many presentations on the development of new/evaluation of existing digital resources highlighted the importance of theoretical as well as technical considerations: for example, Tyler Kendall (Duke University) and Amanda French (North Carolina State University) described how their aversion to the hypothesis that transcripts are 'unbiased representations of the data' (cf. Edwards, 2001: 321) has led them to develop a 'proof of concept' tool [involving a MySQL database, application pages written in PHP and open source phonetic software (Praat)] that links transcript text to audio data at the utterance-unit level and, by so doing, provides a more robust (and linguistically accurate) tie between the audio data and the analysts' representations of it. It is their belief that their NC SLAAP software has 'potentially tremendous implications for a wide range of linguistic approaches'. The next step, presumably, is to encourage academics within these linguistic sub-disciplines to try out the tool for themselves, and then provide the kind of feedback that will help further develop it (in a way that is useful for these different sub-fields).

Interestingly, Stan Ruecker sought to encourage participants to reflect upon the different phases of the processes we engage in as part of our digital humanities work. In particular, he highlighted the implicit messages that we might be giving through

the terminology we utilize (for example, 'user'), and encouraged participants to draw from the insights of Gibson (1979), Davis (1989), and others in respect to the human experience when engaging with technology (Ruecker particularly emphasized the importance of an approach that seeks to combine functionality and usability with a strong 'pleasure' component).

6 A Note about . . . the Social Aspect

I cannot write a report about a conference in Paris without saying something about the city itself. As well as being able to enjoy the beauty of the buildings in which the different parts of the conference were held, the Local Organizing Committee organized some excellent events, including a visit to the Louvre, a banquet on the Bateaux-Mouches, and (for those who could stay beyond the conference proper) an excursion to Monet's house at Giverny, all of which showed off Paris and its surroundings to perfection. Indeed, it provided one more reason why this conference was, quite simply, not-to-be-missed!

Those unfortunate readers who were not able to attend the conference missed not only the social events but also the animated discussions that followed many of the presentations. However, one can catch a sense of the quality of the conference by reading the conference abstracts (available from <http://www.allc-ach2006.colloques.paris-sorbonne.fr/DHs.pdf>).

7 And Finally . . . Looking Back to Look Forward

As this report has revealed, there is a strong international element to both this conference and to ADHO and its affiliated organizations. For example, in addition to the countries represented by the papers mentioned above, there were representatives at Digital Humanities 2006 from

Austria, Bulgaria, China, Gambia, Germany, Greece, Ireland, Japan, Netherlands, Norway, Poland, Serbia, Slovenia, Sweden and Switzerland.

What is also clear is that, although the newly established Digital Humanities conference seems to have maintained its strong links with its literary and linguistic computing past, there is a real desire to embrace digital humanities in its broadest sense (hence the choice of plenary speakers).

Interestingly, in her report of the ACH/ALLC 2001 conference, Terras emphasized that 'Humanities Computing [was] still a very young, developing field', which nevertheless was driving (rather than being driven by) humanities research. She also reported the excitement felt at that conference, as participants contemplated the future. Five years later, Terras was among many to adopt a seemingly more 'restrained' stance in respect to the influence of the Digital Humanities within the wider Humanities community. But the awareness that there are potential struggles still to overcome should be viewed as constituting a positive (rather than a negative) step, in my view. Indeed, I would argue that such critical self-evaluation is a sign that we are beginning to truly understand the importance of 'learning to speak one another's language' in a way that leads to multi-cultural competence. And, once we can speak cross-culturally with clarity, we will have a better understanding of the collective wants, needs and aspirations of the wider Humanities community, as well as our own.

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Note

- 1 ADHO is administered by a Steering Committee that represents The Association for Literary and Linguistic Computing (ALLC) and The Association for Computers in the Humanities (ACH). Discussions concerning membership are also underway with The Society for Digital Humanities/Société pour l'étude des médias interactifs.