Showcase #1
Computer Science for Historians
Francesco Beretta, University Lyon 3 Jean Moulin

Since three years I have been teaching « computer science for historians » at University Lyon 3 Jean Moulin. The course includes 20 hours in ten lessons and was attended by ten to thirty students. It is intended for history students in first semester of Master's degree : they begin at this stage with information collection in archival sources and bibliography, which they will later use to write their Master's thesis. Thus, the issue is to provide them with digital methods for storing research information.

In the first year, I offered them the possibility of using the SyMoGIH project's collaborative database (cf. http://symogih.org) but it was, from an educational point of view, a too long step and the idea of sharing their information with other researchers didn't delight them. I thus developed a postgreSQL database with a simple PHP interface, based on the SyMoGIH generic data model and synchronized with the project's ontology. In this way the student's data is stored locally but it can be shared at a later time. The issue was then : will the students be able to use the distributed database for their Master's research ?

During the course I discovered that most of them systematically use Facebook and e-mail, but their conception of word processing software is quite similar to the use of a sheet of paper (and indeed some use paper to take notes in the archives). Consequently, I first had to teach them basic skills like using stylesheets, or indexing named entities, or creating a bibliography with Zotero. Then I went over to basic data modeling and taught them how to use the distributed database according to a semantic suitable for their own research agenda. I then introduced SQL queries and showed how you can produce new knowledge combining data, or how you can visualize data with basic tools like Calc or Visone.

This approach seems not to be suitable for the given context. Many students were really motivated and understood how useful the distributed database could be, but only a couple of them managed to actually use it for research. Three major issues appeared : firstly, most students have difficulties with installing and using new software ; secondly, history students have real problems with the abstraction one needs to conceive, produce and manage data ; finally, they prefer to use more 'traditional' tools like paper, word processing software or spreadsheets.

Therefore I must look for a new approach next year: I could try to teach them how to store data in a very simple database ; or let them discover DBPedia and use the basics of semantic web to make them acquainted with the concept of 'data' ; or I could try to use some parts of the 'Programming historian' course (http://programminghistorian.org) but I'm afraid it would be quite difficult for them to install and use Python.

In the workshop I would like to share my experience and questions, and discuss them with other digital humanists.

Francesco Beretta is CNRS (Centre national de la recherche scientifique) research fellow since 2005. He is responsible of the LARHRA's (Laboratoire de recherche historique Rhône-Alpes) Digital History Department (http://larhra.ish-lyon.cnrs.fr/Pole_Methodes/index_fr.php).

Specialist in the history of the Roman Inquisition and the Scientific Revolution (doctorate in 1995 on Galileo's trial), he developed his skills in digital humanities, especially in the field of data modeling, relational databases and text encoding in XML/TEI format, providing training to students and colleagues, and contributing significantly to the establishment of the SyMoGIH platform.

Showcase #2
Computational methods in the humanities
David J. Birnbaum, University of Pittsburgh

For the past six semesters I have been teaching an undergraduate course entitled "Computational methods in the humanities," which is organized around the "humanities computing" aspects of DH. The course is cross-listed in seven humanities departments plus Information Science, and the typical enrolled student is a humanities concentrator with no prior programming experience. Over the course of fourteen weeks the students learn to use a wide range of XML-related and web technologies to explore humanities research questions that they identify and develop within their individual areas of study, for which they are required to do all of their own programming (no libraries, frameworks, or content- management systems are permitted).

The research project is the focus of the course, emphasizing the message that this is a humanities course that involves the use of technology, rather than a programming course with humanities problem sets. The technological focus is on hand-on markup, programming, and development (XML, Relax NG, Schematron, XPath, XSLT, XQuery, SVG, HTML, CSS, JavaScript), that is, on the aspects of DH that involve building (not just using) computational tools that create new knowledge in the humanities. The ambitious range of languages covered becomes manageable because the pedagogical organization is task-oriented, so that instead of learning the languages comprehensively (which would not be possible in a single semester), students instead learn how to complete the specific tasks that are required by their research projects, and they do this with impressive success. In this respect, the pedagogical focus might be compared to the movement in second-language teaching away from a grammatical organization and toward a functional, proficiency-oriented one, where instead of learning a language as an object of study (as might be appropriate in a linguistics course, where one learns *about* a language), students *acquire* a second language by learning how to participate in specific scaffolded communicative tasks that require the use of the language.

My course was featured in a guest NITLE blog posting by my first two undergraduate teaching assistants (http://tinyurl.com/cx5nmps), and one distinctive feature of the course is that students who are successful are invited to join the instructional team in subsequent semesters, where they assist in all aspects of the course, including mentoring student projects. The course is distinguished from other DH courses with which I am acquainted by its concentration on exploring analytical research questions (not just publishing digital editions and not just acquiring technical skills), on building (not just using) tools, and on learning a wide range of technologies in a task-oriented manner. Although there are, to be sure, many other components of a DH curriculum broadly conceived, humanities computing has unquestionably defined a productive set of methods for conducting some types of humanities research, and my course has proven effective in enabling students to develop impressive practical technical expertise while retaining a clear and consistent focus on the humanities research question.

Course materials are available at http://dh.obdurodon.org, with links to student projects at the bottom of the page.

David J. Birnbaum is Professor and Chair of the Department of Slavic Languages and Literatures at the University of Pittsburgh. He has been involved in the study of electronic text technology since the mid--- 1980s, has delivered presentations at a variety of electronic text technology conferences, and has served on the board of the Association for Computers and the Humanities, the editorial board of *Markup Languages: Theory and Practice*, the Text Encoding Initiative Council, and the Advisory Board for Balisage: the Markup Conference. Much of his own electronic text work intersects with his research in medieval Slavic manuscript studies, but he also often writes about issues in the philosophy of markup.

Showcase #3

Towards multimodal literacies:
"eTalk", a new form to transmit knowledge
Cyril Bornet (EFPL), Claire Clivaz (Unil), Nicole Durisch Gauthier (HEP-Vaud),
Frédéric Kaplan (EPFL)

The printed culture has led Western culture to privilege written and printed texts as the essential ways to transmit knowledge by all the possible cultural expressions and tasks, teaching and learning included. The top period of this printed culture has even pull out of the academy the teaching of rhetorics, at the end of the 19th century in German or French universities (Belhoste, 1990). If other cultures know plural literacies (Johnson & Parker, 2009), the digital culture, at the evidence, represents an opportunity to rediscover the potential of multimodal literacies, at the crossing of orality, visuality and textuality, as Kress argued already in 1997 (see also Clivaz, 2012). Cultures largely based on orality can begin to claim for their presence among the digital ressources, as the Indian Wikimedia project *People are knowledge*

demonstrates. In the Western culture, the presence, from academic spheres to schools, of rhetorics, with its three aspects logos, pathos and ethos, will surely transform the ways to transmit knowledge.

To test this challenge, an interdisciplinary team from the Ladhul (Unil), the DHLab (EPFL) and the HEP-Vaud has done a first series of «eTalks» on funeral rituals in diverse religious traditions: unil.ch/ritesfuneraires (Clivaz et al., 2014). It is a new multimedia form, working from orality with also written texts, images and hyperlinks. It is possible to read/look the entire of an eTalk (immersive reading/audition), or to be fully actor in it, to go out and come in again, to confront the position of the author with direct hyperlinks to all the sources available in open access online. An editor allows researchers to build easy new eTalks: the code is in opensource on Github.

The presentation will develop epistemological questions, then presents an eTalk and a brief history of its conception. Finally, further perspectives will be developed, such as a second publication scheduled on the "Enhanced Human", and a new use for the eTalk, at the level of pedagogy, in the training of Swiss teachers in Lausanne. Indeed, during the past two decades, universities and tertiary level colleges in Switzerland and in other OECD countries faced a substantial increase of their students population.

As one of its direct consequences "the maintenance and/ or increase of class sizes in colleges and universities, especially at undergraduate level" is a central issue (Mulryan-Kyne, 2010). In large classes, lecturing remains the predominant teaching approach. The presentation will explore the potential of the eTalks to remediate to such challenges.

Claire Clivaz is assistant professor in New Testament and Early Christian Literature at the University of Lausanne (CH) and member of the LADHUL at UNIL (www.unil.ch/ladhul). With Frederic Kaplan (DHLab, EPFL) and other colleagues, she has started the «Digital Humanities» in CH, with numeours projects, such as the DH 2014 or the creation of the eTalks, or research fund on DH and Arabic manuscripts of the New Testament (www.unil.ch/nt---arabe). Author and director of several books and articles, she has notably lead this collected essays: C. Clivaz – A. Gregory – D. Hamidovic (eds), with S. Schulthess, *Digital Humanities in Biblical, Early Jewish and Early Christian Studies* (*Scholarly Communication 2*), Leiden : Brill, 2013*.*

Nicole Durisch Gauthier is Dr in Arts and Humanities (University of Geneva) and professor---trainer in didactic of history and religious studies at the *Haute Ecole Pegagique* in Lausanne. After on online PhD on Egyptology (https://archive---ouverte.unige.ch/unige:27006), she has notably contributed with articles to: *La fin du monde. Analyses plurielles d'un motif religieux, scientifique et culturel,* Genève, Labor et Fides, 2012 ; *Dans le laboratoire de l'historien des religions. Mélanges offerts à Philippe Borgeaud,* Genève, Labor et Fides, 2011 ; *Et Dieu créa Darwin. Théorie de l'évolution et créationnisme en Suisse aujourd'hui,* Genève, Labor et Fides, 2011 ; *Religions antiques. Une introduction comparée,* Genève Labor et Fides, 2008.

Cyril Bornet, is a computer science engineer graduated from EPFL and currently PhD student at the EPFL DHLAB, under the direction of prof. Frederic Kaplan. His thesis

"Digital storytelling" is built around the work of Daniel de Roulet and aims to study the influence of the narrative organization of complex narratives and how new technologies reading analyzes may influence writing ("How do you write when you know how it is read").

Prof. Frédéric Kaplan holds the Digital Humanities Chair at Ecole Polytechnique Federale de Lausanne (EPFL) and directs the Digital Humanities Lab (DHLAB). Graduate of the Ecole Nationale Superieure des Telecommunications in Paris, he completed a PhD in Artificial Intelligence at the University Paris VI. He then worked for ten years at Sony Computer Science Laboratory, and for six years in the unit of educational research at EPFL, at Rolex Learning Center. He has published numerous books and more than a hundred scientific publications. http://dhlab.epfl.ch

Showcase #4
ClipNotes in the Classroom:
Digital Film Annotation and Collaborative Learning
Andrew deWaard, UCLA

This presentation will demonstrate a UCLA software project entitled ClipNotes, a collaborative, XML-based Windows/iPad app project that facilitates quick annotation, segmentation and presentation of film clips. The design of ClipNotes is deceptively simple: it allows users to mark up video files with metadata and then present and share this analysis. Start/stop times, clip descriptions, and captions are assembled in easily-produced XML files, which when linked to the video file, make precise, granular analysis possible, as well as easily presented and disseminated. A public repository for these XML files is available at clipnotes.org, which will allow for widespread sharing of textual analysis and should provide an invaluable teaching resource. For obvious copyright reasons, the films are not included, but guides are available to demonstrate how DVDs can be easily and legally encoded into digital files under fair use exemptions. ClipNotes then links this video with the XML file that provides the annotation, meaning scholars can share detailed film analyses without encountering any copyright illegalities. To get the repository started, dozens of films have been coded in XML and are available for teaching usage. *Citizen Kane*, of course, has been catalogued, providing quick access to its landmark visual style. The ability to quickly but briefly demonstrate a series of scenes -- particularly ones involving non-static elements, such as sound or camera movement -- is a tremendous resource in a teaching or presentation situation. One of the distinct strengths of film is the symphonic arrangement of audiovisual patterns, something that is lost in merely showing screen grabs or a few extended scenes.

In this presentation, examples will be shown of traditional textual analysis amplified by ClipNotes, as well as a demonstration of how the program can be integrated into the classroom in a variety of forms. Teaching the basics of film form and style has been a key focus for the ClipNotes team, resulting in a series of films that have been

annotated with definitions and examples in an effort to guide students through the specifics of film terminology in an engaging and illustrative manner. The ability to make these film form guides available in the campus library and downloadable online has made them an easily accessible, public resource. Another teaching opportunity with ClipNotes arises with the possibility of teaching students how to make their own annotated films, or collaborate on the construction of one as a team, resulting in a non-traditional, innovative film analysis assignment that also allows students to contribute to an open-access resource, gently welcoming them into the sphere of knowledge production.

Longer term, ClipNotes provides the opportunity to generate and catalogue large data sets of analytic material for audiovisual texts, opening up quantification and data-processing possibilities. Sound and image are inherently more difficult to catalogue and quantify than the written word, which accounts for some of the delay in the use of digital humanities methods in cinema and media studies. Similar to the Text Encoding Initiative, the data-mining prospects generated by ClipNotes are limitless. With the collaborative generation of a public repository of film annotations, future scholars will be able to map broad, macro-cultural dynamics as a result of this wide-ranging data. In a digital era marked by the vast proliferation of complex texts, software applications such as ClipNotes can be utilized to enact a more rigorously detailed analysis, to archive and disseminate provocative insights, and to extend digital scholarship and learning opportunities.

Andrew deWaard is a PhD candidate at the University of California, Los Angeles. His co-authored manuscript entitled *The Cinema of Steven Soderbergh: indie sex, corporate lies and digital videotape* has just been released for Columbia University Press. His work has appeared in the anthologies *Fight the Power: The Spike Lee Reader*, *Habitus of the 'Hood*, and *The Philosophy of Steven Soderbergh*, as well as the journals *Cinephile* and *IASPM@Journal*. He is currently working on two research projects, "The Cultural Capital Project," a micropayment platform for digital music based on stewardship, and "ClipNotes," an app that facilitates film annotation, as well as his dissertation, which concerns the political economy of intertextuality. His latest work can be seen at andrewdewaard.com

Showcase #5
From Primary Data to Multiple Narratives:
Open Source Tools for Cultural History

Kostis Kornetis, University of New York and Anna-Maria Sichani, University of Athens

Digital Humanities offer brand new ways for the storing, accessing, manipulating, navigating and visualizing of primary data and innovative ways of narrating the past. This novel approach undermines the traditional linear text-based narrative tropes, while introducing collaborative, interdisciplinary, project-based models of scholarship.

The present paper deals with the epistemological and methodological transformation of the teaching of cultural history, with the help of computational techniques and methods. It focuses on the gradual shift from traditional cultural history as a learning process to its rendition in the form of a digital bag, as digital cultural history. It shows how, alongside literature review, archive and field research, open source web tools (web mapping technologies, content management systems, visualisation techniques) can be introduced and integrated in the cultural history teaching process, through a comparative media approach.

The paper, thus endorses the teaching of cultural history as a horizontal, collaborative and participatory process, rather than a one-sided and hierarchical one, and actively promotes the digital management of knowledge.

The case study that will be presented in order to examine how critical thinking on cultural history as a discipline is aided and fostered by open source tools is SonorCities, an educational tool that aims to explore the ethnographic background of soundscapes. It uses, alongside a robust literature review and a pedagogical introduction on ethnography and cultural history of soundscapes in PDF format, an interactive Pilot application built with the VisualEyes open tool, focusing on the case study of Yeni Cami - the dönme mosque of Salonica- and the changes of its soundscape over time. Through a vast number of displays and controls offered by this web-based open scholarly tool, users are able to represent and interact with a variety of cultural and historical assets: from administrative document inscriptions, travelogues and memoirs, to audio or music recordings, still or moving images and site plans. Students - both as creators and as users - experiment in locating those assets in the sound cultural time-map of the city through a multi-sensual approach.

Taking SonorCities and its employment in various classroom situations as our case study, we aim to address a number of questions regarding the (re-)vision of the cultural politics of teaching. To what extent is teaching and learning redefined by making students (co-)producers of knowledge, through the evaluation of and experimentation with new tools and cutting edge technologies and through the development of key transferable skills in an interdisciplinary scholarly environment? Furthermore, to what extent is community engagement enhanced through the use of open source tools? In what ways, finally, the feedback offered by local communities, other researchers, but most importantly students, can help revise and improve the research project, rendering it a real and dynamic open platform for knowledge production?

Through their very feedback, the paper concludes, these users become active collaborators, contributors and partners in the afterlife of the educational project, helping to transform cultural history teaching and learning into a veritable community of practice.

Kostis Kornetis holds a doctorate in History and Civilization (European University Institute, Florence), an M.A. with Distinction in Southeastern European History (University College London), a B.A. in War Studies and Modern Greek (King's College London), and a Vordiplom in History and Political Science (L.M.U., Munich). His research interests include the history of European authoritarian regimes and social movements in the 20th century, political cinema, as well as the analysis of oral testimonies. He has worked extensively on the history and memory of the 1960s, the methodology of oral history, the use of film as a source for social and cultural history, and the history of the senses. His book Children of the Dictatorship: Student Resistance, Cultural Politics and the "Long 1960s" in Greece was published by Berghahn Books in 2013. Between 2007 and 2012, he was a Visiting Assistant Professor in History at Brown University. In September 2012 he joined the Center for European and Mediterranean Studies of New York University as Assistant Professor/Faculty Fellow.

Anna-Maria Sichani is a research associate at DARIAH-GR team of Academy of Athens. She is currently working towards a PhD in Modern Greek Studies (National University of Athens) focusing on cultural politics of poetry during the Greek Junta (1967-1974). Anna-Maria holds also a MA in Digital Humanities (University College London) and she has solid professional experience in large scale digital humanities projects, mainly in domains of eInfrastructures (DARIAH) and crowd sourcing (Transcribe Bentham). Anna-Maria's research interests include cultural and social history of literature as well as questions towards the literary establishment. While familiar with the academic and scientific landscape, she is very much interested in digital technologies and their innovative application to Humanities scholarship, mainly to literary and cultural studies, as well as in comparative media studies and digital pedagogy.

Showcase #6
The Teething Troubles of Teaching Digital Humanities:
Sharing knowledge and mapping challenges
Fernie Maas (University of Amsterdam), Stef Scagliola (University of Rotterdam),
Els Stronks (University of Utrecht)

Background
The last decade has shown an exponential growth of research in the field of Digital Humanities. At the same time, the integration of DH in the actual practice of teaching faces considerable challenges. With the support of CLARIAH the Erasmus Studio has taken up the initiative of mapping all existing DH teaching in the Netherlands and Flanders and of sending out a survey. The goals were to offer students an overview of where they can acquire specific DH-skills, create a reference for lecturers to find suitable material to set up a course, and assess the state of the art with regard to DH education. The results of the inventory and survey were presented by a group of researchers who have created a platform for

knowledge exchange in the Netherlands and Flanders, at the DH Benelux Conference in The Hague (June 12-13, 2014). In Lausanne they intend to present an updated version of the map and survey as a basis for a discussion on issues that should be resolved and that are of interest to all others who are developing Digital Humanities courses and curricula at European universities.

Challenges that have been identified

Firstly, there are difficulties in organising and financing DH education. Departments tend to reshuffle existing subjects and correspondent budgets. The interdisciplinary character of DH however, calls for the establishment and support of (new) connections at a higher level of the organisation with in-house IT services and Computer Science departments. Bureaucracy seems to be a frequent obstacle, and its role in hampering progress should be brought to the attention of the top of the academic hierarchy.

Secondly, the DH calls for rethinking teaching methods. Student groups and teaching staff appear to be rather heterogeneous in terms of digital literacy and competence. Moreover, a focus on process instead of results seems to be more suitable in assessing students' work. This means reconsidering a number of traditional didactic principles. Participants also signalled a lack of teaching material and best practices.

Thirdly, theoretical issues remain unresolved about the ideal place of DH in the humanities curriculum. Should it remain a separate program or should it be fully integrated in every curriculum, as part of basic academic skills? Another issue is language policy. How do we reconcile offering most DH courses in English with the importance of language for handling data from the own cultural heritage field?

Contributors:

Drs. Fernie Maas (f.g.t.maas@vu.nl) is involved in digital research on cultural industry and is currently responsible for developing an e-Humanities curriculum for two universities in Amsterdam: Universiteit van Amsterdam and Vrije Universiteit.

Dr. Stef Scagliola (scagliola@eshcc.eur.nl) is a postdoc researcher at the Erasmus University Rotterdam (Erasmus Studio for e-research). She is an historian specialized in digital audiovisual archives and coordinator of the minor *Digital Culture*.

Prof. Dr. Els Stronks (E.Stronks@uu.nl) is professor of Early Modern Dutch Literature and Culture and coordinator of Digital Humanities curriculum at the Humanities faculty of Utrecht University.

Showcase #7
Constructionism and the pedagogy of text analysis in the DH classroom
Aris Xanthos, University of Lausanne

Although computer-assisted text analysis has been a fundamental and long-lasting area of research in Digital Humanities (DH), it has not often been addressed from a pedagogical viewpoint in the literature.

Most of the relatively few explicit proposals in that domain have adopted one of two main approaches: either teaching students how to use specialized text analysis software (such as the popular Voyant tools), or how to use the text processing facilities of a general-purpose programming language (such as Perl or Python)–with a sensible preference for the former.

Teaching both types of classes for several years has given me a sense of their complementarity. On the one hand, the main advantage of specialized software in this context is productivity: the interface of such tools has become so intuitive that students find themselves building concordances or monitoring word frequencies in a matter of minutes, literally. On the downside, the ease with which a wealth of sophisticated visualizations can be produced does not necessarily help students internalize a working model of the concepts and processes involved in text analysis, nor does it help instructors evaluate the students' degree of understanding.

On the other hand, correctly implementing any non-trivial text analysis algorithm with a general-purpose programming language requires a fine-grained comprehension of the methodological notions involved, and the code produced by a student in an attempt to do so usually provides much insight into that comprehension. However this presupposes an extended period of theoretical and practical work for students to familiarize with the basic notions underlying programming (variables, iteration, conditions, etc.), as well as with the considered language's development environment and syntax.

This contribution reports on Textable, an ongoing pedagogical innovation project whose main objective is to explore the usefulness of the "visual programming" paradigm as a middle ground between the specialized software and the general-purpose language approaches to text analysis pedagogy. In this framework, students actively engage in the construction of increasingly complex tools by arranging and configuring graphical elements that represent primitive text analytical procedures such as recoding, segmentation, counting, visualization, etc. Drawing on the experience of using this novel pedagogical approach, I will discuss the extent to which it succeeds in overcoming the weaknesses of the more traditional ones while making the most of their respective strengths.

Aris Xanthos is a senior lecturer in Humanities Computing at the University of Lausanne, with several years' experience teaching computer-assisted text analysis and other DH skills to BA and MA students at the University of Lausanne's Faculty of Arts.