

# HVERFORD

C O L L E G E

*Department of Music*

September 30, 2012

Peter Scott  
Office of Grant Management  
National Endowment for the Humanities

Dear Peter Scott,

I am pleased to offer a report on the first year of The Lost Voices Project currently supported by a Scholarly Editions and Translations Grant from the NEH (RQ-50546-11). Thanks to additional support for a sabbatical leave and programming from Haverford College and an ACLS Digital Innovations Fellowship we have made much progress during the last 12 months. Members of the Lost Voices Project team are excited about our work, which is gaining a good deal of public attention in the field. This report summarizes our work to date. The attached booklet is a print version of our methods, standards, and results. Our editions, analyses, and reconstructions are available on-line via our expanded web-sites. NEH funds used so far are detailed on an accompanying financial report.

Project Summary and Goals. The Lost Voices Project centers on a set of 16th-century printed music books, which form the core for a novel set of digital tools that will allow scholars, students, and performers to interrogate sources, texts, and music in new ways. The main tasks of the work plan for this past year involved several intersecting tasks:

- Complete the image and modern edition archive started during my NEH Digital Humanities Start-Up Grant (2008-2010).
- Build a thesaurus of musical conventions, and show how these would be of use in our reconstructions of missing voices.
- Develop links between the technical tools and resources, most notably the Music Encoding Initiative (MEI) and Text Encoding Initiative (TEI), and a content management system that would coordinate images, editions, and our thesaurus in an interactive web site.
- Define user roles and experiences, for scholars, students, performers, and those from cognate disciplines.

Activities. I worked simultaneously on several fronts, coordinating the work of different aspects of the project. Discussions were ongoing via email and electronic screen sharing. We also gathered periodically at scholarly conferences, some convened especially for the Lost Voices Project.

- July-August 2011. I consulted with the Advisory Board and especially with Jen Rajchel, Digital Humanities Intern at Bryn Mawr and Haverford College. Development of “Key Challenges” document detailing tasks for the year, including definition of user roles, encoding standards, integration of standards and tools, development of a community of users, via conferences and conversations.

- September 2011. I visited the Newberry Library and Center for Renaissance Studies for conversations with staff about literary texts, editorial policies, encoding standards, and models of collaboration.
- October 2011. I travelled to the Centre d'Etudes supérieures de la Renaissance (CESR) in Tours, France, for work with the editorial and project team. We also convened the Ecole Thematique II, an international symposium on reconstruction of musical fragments that was funded in large measure by the Centre national de la recherche scientifique (CNRS). Funds from the ACLS Digital Innovations Fellowship supported participation by Stefano Mengozzi (University of Michigan) and Vassiliki Koutsobina (University of Athens), who will contribute to the Lost Voices project.
- November 2011. I attended the annual meeting of American Musicological Society. Meetings and luncheon with Advisory Board members, technical consultants, and participants in other digital humanities projects devoted to early music. Our conversations resulted in plans for a meeting at Haverford, and thoughts on how to share methods and findings.
- December 2011 to January 2012. Conversations with technical consultants Andrew Hankinson (McGill University) Raffaele Vigiante (King's College, London), and Joe Gilbert (University of Virginia) for web design, content management system, and integration with MEI and TEI standards. We made rapid progress towards solution of some technical challenges.
- January 2012. I went to the University of Virginia to meet with members of Scholars Lab digital humanities center, and also with Joe Gilbert, web design consultant.
- February 2012. Lost Voices Project Conference at Haverford. Over 40 participants in two-day set of presentations and discussions about early music and the digital humanities, including members of our advisory board, librarians, scholars, and students from the Philadelphia area. Others joined by electronic conference software. Extensive discussion of musical and technical challenges, as well as ideas for using several (rather than one) student assistants for analysis and reconstruction. "Grad Sourcing" (a term suggested by the McGill University team), seemed to capture the spirit of the model.
- March-April 2012. I travelled to the annual meeting of the Renaissance Society of America for discussions with advisory board members and also potential collaborators. Kate van Orden, Stefano Mengozzi, and Susan Weiss joined advisory board to replace Jenni Bloxam and Honey Meconi. There was also a subsequent trip to Peabody Conservatory in Baltimore to present the Thesaurus and reconstruction project to students interested in participating as summer research assistants. Visit to Princeton University to share Du Chemin project with students in Renaissance music class.
- May 2012. I returned to the Peabody Conservatory for a training session with student summer research assistants. Subsequent web-based sessions for students unable to travel to Peabody. I also went to McGill University for discussions with technical team member Andrew Hankinson, and also review of thesaurus with specialists Julie Cumming and Peter Schubert.
- June-July 2012. Coordination of work with student research assistants for analysis and reconstruction.
- July 2012. I went to the CESR in Tours for meetings with editorial and technical teams, then to the annual Medieval-Renaissance Music Conference (University of Nottingham, UK), where I delivered a keynote lecture "Early Music in the Digital Domain: Music, Musicology, and Technologies of Reproduction." The Lost Voices Project was showcased in a workshop and concert with members of a professional vocal ensemble, the Binchois Consort (Andrew Kirkman, Director). Also various discussions with members of other digital projects on early music.

- August 2012. I went to the Center for the History of Music Theory and Literature (Indiana University School of Music) conference “Scholarly Editions and the Digital Age: Text and Music.” Presentation on the Lost Voices Project and extensive discussion of future collaboration with the Center and its planned use of MEI and TEI standards for its editions of theoretical texts from the fifteenth and sixteenth centuries.

Accomplishments. Solutions to most of the goals we set out in the Key Challenges document of July 2011 (as explained above) are in hand or well underway (see samples and links below for illustrations; fuller explanation of methods and standards can be found in the accompanying dossier):

- Du Chemin Image and Edition Archive. Digital scans of all sixteen sets are available on the web for search, viewing, and download. Modern editions of all sixteen books have been completed and corrected. Books 1, 2, 3, 5, and 9 are available for download, through the web site. The rest of the complete chansons (books 4, 6, 7, 8, 10, and 11) have been digitally engraved; we expect to upload them to the web site in September and October, once our French partners return from summer hiatus. Pieces from books 12-16 have been transcribed and corrected, and are available via our Editor’s Forum for use by the team members for their reconstructions.
- Thesaurus and Controlled Vocabulary. Over 150 pages of musical examples, organized according to musical functions and principles; categories combine insights and explanations of historical and modern sources, all developed in active consultation with Du Chemin Advisory Board.
- Methods for Analysis and Data Entry. We developed a detailed workflow for analysis, with scores, worksheets, and a web form, all using the controlled vocabulary. Double-keyed entry by a team of some ten graduate assistants working on overlapping segments of the Du Chemin repertory produced analysis of about half of the extant Du Chemin chanson repertory (that is, five of eleven books of complete chansons), yielding in all some 8,000 analytic “events” for our database. The Lost Voices web interface will allow us to compare and evaluate the results in an effort to refine our methods, and expand or revise the controlled vocabulary.
- Reconstructions. Using the same controlled vocabulary, we also established methods for the reconstructions. As in the case of the analytic work, our aim was to create two or more reconstructions of each piece in an effort to refine our methods and sustain deeper conversations about style and structure in this repertory. Members of the graduate student team completed some 90 individual reconstructions, variously distributed over about three dozen of the 80 incomplete pieces found in the Du Chemin sets. Some of the student compositions were performed in concert by the Binchois Consort at Nottingham this summer, and were enthusiastically received by the many scholars in attendance. And thanks to the new web interface and related MEI to VexFlow rendering system, we can rapidly display any portion of any reconstruction for review, discussion, and citation.
- Web Design. From Wireframe to html5 encoding. Working with the advisory board and especially consultant Joe Gilbert we planned an interface for the presentation of the thesaurus, the reconstructions, and a collaborative workspace for study and discussion. Chelsea Lobdell (Swarthmore College) recently completed work on the html templates, which now offer a full range of display functions for the user.
- Music Encoding and Display: Working with Raffaele Vigiante (King’s College, London), we found ways to move our Sibelius and Finale transcriptions (commercial software widely used by scholars) to MEI

and in turn to render it dynamically in a browser window under the html5 standard using a free tool, *VexFlow*, developed by Richard Lewis (University of London, Goldsmith's College).

- Content Management System (CMS). Working with Andrew Hankinson (McGill University), Adam Crandell (Haverford College) and other team members, we planned specifications for a CMS that will coordinate the various files needed for the Lost Voices project. Andrew selected Django as our CMS, and is now linking this interface to the various server-based tools and data. Parts of it are working (as of mid-September); the rest will be working in time for the Ecole Thematique III in Tours, October 22-26 (sample images in the appendix below).
- Text project. Working with members of the advisory board, Newberry Library, and CESR Bibliothèques virtuelles humanistes (BVH) initiative, we have defined our goals and editorial standards for the literary texts of the Du Chemin repertory. We have mapped out ways to adapt TEI schemas developed by the CESR for our needs, and we have found a recent Ph.D. student who will work with the Newberry and the CESR during 2012-13 to encode a selection of Du Chemin books and related literary anthologies. Now with Carla Zecher back from sabbatical leave, we are poised to hire recent Ph.D. in French Literature, Michelle Miller (University of Michigan), send her to Tours for TEI training in fall 2012, then have her complete transcriptions and editions in winter-spring of 2013, with supervision and validation by Newberry and CESR. Fall 2013 integration with Du Chemin Lost Voices web site.

Audiences. The Lost Voices Project aims to encourage collaboration, and so from the outset we have been concerned with the development of a community of users: scholars, students, performers, and information technology specialists, whose perspectives will enrich the study of early music and early printed sources. My site visits and conversations at various academic conferences tried to encourage participation, especially by allowing each prospective user to 'buy in', seeing how his or her specialized interests might be enriched through the tools and techniques we are developing.

- My conversations with Jen Rajchel here at the Tri-College Digital Humanities Initiative (jointly supported by Haverford, Bryn Mawr, and Swarthmore Colleges with major funding from the Mellon Foundation) helped me understand that digital resources are built and used by several different communities of users. We thus envisage a set of 'layered' authorities for the use of the Lost Voices Project. One set of users will be experts: owners of the site, guest editors, scholars and advanced students who will submit reconstructions, those prepared to discuss the reconstructions or aspects of style. Another set of users will come to things with other needs: the undergraduate music or music history student who needs to find a manageable project or some basic information for a course, or a performing ensemble in search of new music. We must think of colleagues from libraries and IT centers, students of literary or print history, and indeed those interested in the digital humanities per se. And lastly we must consider the many readers for whom the digital humanities are largely mysterious or even forbidding territory. And so throughout I have remained ready and willing to explain the project according to what seem to be the needs and interests of each potential user I encounter.
- It seems to be a good moment for this sort of work. Other specialists in Renaissance music are developing related tools and resources. I have welcomed several of them to our meetings, and have joined the advisory boards of two of these (Jesse Rodin's Josquin Research Project and the ELVIS Project underway at McGill University and other institutions). I am also in regular contact with the directors of several other projects, including Mauro Calcagno (Marenzio Project; funded in part by the NEH), Julia Craig-McFeeley (DIAMM, the leading digital archive for early music), and others, too. We are gathering a good deal of interest from musicologists, and in turn from their students, who are now at work as summer research assistants. Still others have used the Du Chemin archive in their classes

for editorial projects. In July I gave a keynote lecture to the annual conference on Medieval and Renaissance Music to over 200 colleagues from the US, Canada, the UK, and continental Europe. I receive new messages of interest quite regularly.

Lessons Learned and Adjustments to Work Plan. Assessment of the work has been underway throughout our discussions. The meeting at Haverford in February was perhaps the most important moment in this process, since by this time we had a 'wireframe' of the new web interface, and also had a very complete first version of the thesaurus. There were many suggestions on how to improve our ideas, and I have tried to incorporate as many as possible as we have moved towards the first public version of the web site, and to plan the work of the student assistants. The project is large, varied, and filled with technical and collaborative challenges.

The fall of 2012 will be a second crucial phase of assessment, chiefly through the presentations at the Ecole thematique III (Tours, October 22-26) and at the American Musicological Society Meeting (New Orleans, November 1-4). We will also hold another conference at Haverford in early March. All of this will prepare us for revisions to the analytic methodology and guidelines for reconstruction. We will also continue work on technical issues for the presentation of variant readings and competitive reconstructions. The web site will add functions for user accounts, comments, and will be integrated with the portion of our work devoted to the literary texts.

We recognize cannot implement all ideas at once, particularly since we are breaking much new ground in this resource. Our plan is thus to 'freeze' the set of display and search features currently under development, assemble the results of the student analysis and reconstruction, then solicit a full range of suggestions for improvements as we demonstrate the project in the fall of 2012 at various academic conferences, and through informal networks, too.

Our division of labor and our timetable of work have changed in two important ways:

- Work on the literary text project is just starting in the Fall of 2012. Carla Zecher (Newberry Library) was unexpectedly on sabbatical leave for 2011-2012 (she learned of a fellowship at the Huntington Library not long after the NEH award was announced), and so was unable to take part in conferences and workshops with Du Chemin. But this summer Carla helped us to identify a well-qualified scholar of French literature and language, Michelle Miller, who will partner with the Newberry and the CESR to encode the literary texts. We will contract with the Newberry to deliver TEI encodings, and are working with the CESR to define technical specifications and practices. The delay does not affect our progress with the rest of the project.
- For the musical analysis and reconstruction, we had originally imagined appointing a single advanced student at the CESR. Instead we decided to distribute these duties among several students suggested by members of the Advisory Board. The collaborative "grad sourced" approach will allow us to test the analytic methodology, helping us to discover points for further inquiry or discussion about style. It will also help us sustain the conversation about the reconstructions, for which there can be no definitive solution but much debate. Already the value of the distributed approach is clear: the reconstructions show some surprising commonalities and also some telling differences. All of this material is available in the new web interface, which thanks to the VexFlow system and MEI allow us to interrogate the alternatives at a very fine level of detail.

Looking ahead to 2012-2013. Thanks to ongoing support from the NEH, the work of the Lost Voices Project continues through September 2013.

- The Lost Voices Project will be a central part of the Ecole thematique III in Tours (October 2012), with 20 invited participants, including one of our student research assistants, who will be in Europe for the year.
- The Lost Voices Project (Freedman, Vendrix) will also be one of four projects featured in a three-hour session to take place at the combined meeting of the American Musicological Society and Society for Music Theory (November 2012), complete with formal responses by invited scholars. Some of our student assistants will travel to the meeting, both to take part in the public session, and also to participate in our internal discussions.
- Meanwhile our partnership with the Newberry Library to edit the literary texts of the chansons will continue in several stages. A Ph.D. research assistant (Michelle Miller) will travel to Tours in October for training as part of their TEI instruction program. We will be adapting TEI schemas designed by the Bibliothèques virtuelles humanistes team of the CESR. They will also be validating Michelle's work, to ensure it can be integrated with our Lost Voices web site next spring and summer. Carla Zecher of the Newberry Library and its Center for Renaissance Studies will supervise all of this work, which will begin in earnest in January of 2013 and continue into April.
- Haverford will host a second gathering of interested scholars, team members, librarians, and others in the early March of 2013. We also hope to hold another gathering in Tours in the fall of 2013, and (as the calendar will permit) an event at the Newberry Library.
- We will also work with our Technical Team to address another key element of our original plan: encoding and dynamic display of variant readings. The MEI standard already contains a rich complement of tools for preserving variant readings and the meta-data that explain them. The system also holds much promise for the encoding of our competitive reconstructions, too.
- Development of the User Accounts feature of our web site. We have already discussed the sorts of tools users might need as part of the research and discussion forums for The Lost Voices Project. Our user interface includes links and preliminary designs for this work. They should be ready in time for the completion of the project in the fall of 2013.
- Student Research Assistants. A second phase of work is planned for summer of 2013. We will revise and update methods, then analyze and reconstruct the remaining music from the Du Chemin chansonniers.
- Documentation, Collaboration, and Pedagogical Approaches. We will write up a full range of supporting materials about our methods and standards (our technical tools are already available on GitHub for sharing by other projects). We will extend our collaboration with ELVIS, with the Josquin Research Project, and the other partners mentioned in this report. Based on what we have already learned in working with graduate student assistants, we also look forward to showing colleagues how the Du Chemin resources (the image archive, the editions, and the Lost Voices Project, too) can be integrated into their advanced classes.

## Conclusions

We have to date already achieved much of what I had hoped. We have made significant progress editorial, musical, technical challenges. Above all we have a team of scholars and students who remain committed to a new spirit of collaborative work on early music using some very new tools of the digital humanities. Thanks to

them, I know that the Lost Voices Project (and the various other initiatives that share these tools and spirit) will move towards completion during 2012-13.

In closing, I would like to express my profound thanks to the NEH and to the panel of scholars who thought my project worthy of support. As a senior scholar in many ways alone in a small liberal arts institution, the grant has given me a chance to work with colleagues (especially junior ones) who are sure move the field forward in years to come. The grant has also given me the gift of time--the pearl beyond all measure in academic life. I am grateful for the support.

Respectfully submitted,

*Richard Freedman*

Richard Freedman  
Professor of Music  
John C. Whitehead Professor of Humanities

Appendices:

A. Links to resources and demonstrations

Du Chemin Project Home Page	<a href="http://duchemin.haverford.edu/">http://duchemin.haverford.edu/</a>
Du Chemin Project: Image and Edition Archive	<a href="http://ricercar.cesr.univ-tours.fr/3-programmes/EMN/duchemin/">http://ricercar.cesr.univ-tours.fr/3-programmes/EMN/duchemin/</a>
Lost Voices Web Site	<a href="http://vm-duchemin.haverford.edu/">http://vm-duchemin.haverford.edu/</a>
Lost Voices Editor's Forum	<a href="http://duchemin.haverford.edu/editorsforum/">http://duchemin.haverford.edu/editorsforum/</a>
Ecole thematique II (2011)	<a href="http://193.52.215.195/Ecole_thematique_2/Accueil.html">http://193.52.215.195/Ecole_thematique_2/Accueil.html</a>
Ecole thematique III (2012)	<a href="http://193.52.215.195/Ecole_thematique_3/Accueil.html">http://193.52.215.195/Ecole_thematique_3/Accueil.html</a>
Digital Resources for the Study of Early Music	<a href="https://sites.google.com/a/haverford.edu/digital-resources/">https://sites.google.com/a/haverford.edu/digital-resources/</a>

B. Images (see PDF)

1. Du Chemin Welcome Page (Haverford)
2. Du Chemin Image Archive (Tours)
3. Du Chemin Engraved Edition (sample)
4. Du Chemin Editor's Forum (Haverford)
5. Ecole Thematique II welcome page (Tours)
6. Du Chemin Thesaurus (title, two sample pages)
7. Sample Reconstructions (excerpts, by Freedman, Derycz, Clement)
8. Du Chemin @ Haverford Poster
9. Sample VexFlow Rendering of MEI
10. Sample from Collaborative Web Site
11. Web Site of Digital Resources for Early Music

C. Participant list

Consultants:

Andrew Hankinson (McGill University)

Raffaele Viglianti (King's College, London)  
Joe Gilbert (University of Virginia)  
Adam Crandell (Haverford College)  
Chelsea Lobdell (Swarthmore College)

#### Student Assistants

Jen Rajchel (Bryn Mawr College)  
Zoe Saunders (Peabody Conservatory)  
Katherine Magruder (Peabody Conservatory)  
Patrick Quinn (Peabody Conservatory)  
Jamie Apgar (University of California, Berkeley)  
Deanna Clement (University of Wisconsin)  
Joshua Holscher (University of Wisconsin)  
Pierre Derycz (University of Michigan)  
Chris Buchanan (Peabody Conservatory)  
John Belkot (Peabody Conservatory)  
Jess Herdman (University of California, Berkeley)  
Jamie Greenberg (Princeton University)

#### Advisory Board

Patrick Macey (Eastman School of Music)  
Cynthia Cyrus (Vanderbilt University)  
Jennifer Thomas (University of Florida)  
Kate Van Orden (University of California, Berkeley; joined in 2012)  
Stefano Mengozzi (University of Michigan; joined in 2012)  
Susan Weiss (Peabody Conservatory; joined in 2012)  
Honey Meconi (University of Rochester; completed in 2012)  
Jenni Bloxam (Williams College; completed in 2012)  
Carla Zecher (Newberry Library)

#### Other scholars who have advised, consulted, or participated in extended conversations:

Jesse Rodin (Stanford University)  
David Crook (University of Wisconsin)  
Julie Cumming (McGill University)  
Peter Schubert (McGill University)  
Mike Cuthbert (MIT)  
Erika Honisch (University of Toronto)  
Craig Sapp (Stanford University)

#### At Haverford February 2012:

Xavier Bisaro (CESR Tours)  
Cynthia Cyrus (Vanderbilt University)  
Patrick Macey (Eastman School of Music)  
Jennifer Thomas (University of Florida)  
Andrew Hankinson (McGill University)  
Ichiro Fujinaga (McGill University)  
Julie Cumming (McGill University)  
Jesse Rodin (Stanford University)



Susan Weiss (Peabody Conservatory)  
Catherine Motuz (McGill University)  
Adam Crandell (Haverford College Library)  
Laurie Allen (Haverford College Library)  
Terry Snyder (Haverford College Library)  
Eric Pomroy (Bryn Mawr College Library)  
John Anderies (Haverford College Library)  
Katherine Rowe (Bryn Mawr College)  
Jen Rajchel (Bryn Mawr College)  
Laura McGrane (Haverford College)  
Darwin Scott (Princeton University Library)  
Donna Fournier (Swarthmore College Library)  
Michelle Oswald (Rutgers University Library)  
Richard Griscom (University of Pennsylvania Library)  
Emily Zazullia (University of Pennsylvania)  
Mike Zarafonetis (Haverford College Library)  
Russell Murray (University of Delaware)  
Norm Medeiros (Haverford College Library)  
Anna Zayaruznaya (Princeton University)

D. Sample Images (see separate document)

1. Digital Du Chemin Welcome Page
2. Les Livres de Chansons Nouvelles de Nicolas Du Chemin (CESR Image and Edition Archive)
3. Sample Engraved Modern Edition (5 pages)
4. Editor's Forum Web Page
5. CESR Ricercar: Ecole thematique II Welcome Page
6. Lost Voices Thesaurus Sample Entries (3 pages)
7. Sample Reconstructions (3 pages)
8. Haverford Lost Voices Conference Poster
9. Lost Voices Web Interface, Search, and VexFlow Display (5 pages)
10. MEI encoding sample for previous VexFlow example

E. Financial Summary (see separate document)