Variations2: Moving Beyond Access to Pedagogy

Mark Notess
24 September 2004
IU Digital Library Brownbag Series
Outline

- project overview
- current status
- beyond access to use
- Variations2 demo
- possible future directions
- broader applicability?
Variations2 Overview

- $3M grant funded by NSF/NEH
- Establish a digital music library testbed system supporting multiple formats: audio, video, score images, score notation
- Develop multiple interfaces for specific user applications in the music library and the classroom
- Conduct research in metadata, usability, copyright, and networking
- Planning to replace VARIATIONS with Variations2 by Summer 2005
Variations2 Staffing

Principal Investigator:
- Michael A. McRobbie

Project Investigators (Abridged):
- Kristine R. Brancolini, Director, Digital Library Program
- Kenneth D. Crews, Professor of Law, Associate Professor of Library and Information Science, and Director, Copyright Management Center
- Philip Ponella, Director, William and Gayle Cook Music Library
- Mary Wallace Davidson, Former Head, William and Gayle Cook Music Library
- Jon W. Dunn, Associate Director for Technology, Digital Library Program, and Senior Technology Advisor, University Libraries
- James Lloyd Fern, Assistant Professor of Music and Manager of Online Learning, University Information Technology Services
- Harriette Hemmasi, Associate Dean and Director of Technical Services, University Libraries
- Eric J. Isaacson, Associate Professor of Music
- Roberta L. Lindsey, Visiting Assistant Professor of Music, IUPUI
- Jenn Riley, Metadata Librarian, Digital Library Program
Variations2 Staffing

Project Staff and Graduate Students:
- Andy Barrett, Graduate Assistant, Music Instruction / Oncourse
- Don Byrd, Research Programmer
- Jim Halliday, Software Analyst/Programmer, System Design/Development
- Caitlin Hunter, Graduate Assistant, Metadata
- Jennifer Jobst, Graduate Assistant, Usability
- Inna Kouper, Graduate Assistant, Usability
- Manoj Kulchania, Software Analyst/Programmer, System Design/Development
- Richard Li, Graduate Assistant, System Design/Development
- Mark Notess, Development Manager
- Ryan Scherle, Software Analyst/Programmer, System Design/Development
- Mona Seghatoleslami, Student Hourly Staff, Metadata
- Ann Shaffer, Graduate Assistant, Metadata
- Dallas Smith, Graduate Assistant, Instructional Design
- Brent Yorgason, Graduate Assistant, Music Theory
Variations2 Overview

Collection Metadata

Collection

Metadata

Access, Control, Bookmarks

content

digitized audio
scanned scores
encoded scores

user interface

users

faculty
students
librarians
Current Status (September 2004)

- 427 recordings & scores
- 660 “creator” records (composers, lyricists...)
- 922 “performers” (individuals, ensembles...)
- 2068 distinct musical works
- Version 3 deployed at IUB and IUPUI
- In third year of pilot projects—6 classes using it this fall
- Pilots include installation of Variations2 client software on students’ own computers; access control limits media use outside library to course reserve material
Beyond Access to Use

What do users want to do AFTER finding what they want?

HEY KITTY, ANOTHER EXCITING DAY OF ACCESSING CONTENT!
Beyond Access to Use - Teaching

Teaching

- create course reserves list
- present, analyze, compare excerpts in class
- create/grade assignments
- give quizzes & exams
Beyond Access to Use - Learning

Learning
- prepare for class (well, sometimes)
- complete & submit assignments
- prepare class presentations
- study for quizzes & exams
Variations2 Demo

<table>
<thead>
<tr>
<th>Work Title</th>
<th>View</th>
<th>Listen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonatas, piano, no. 17, op. 31, no. 2, D minor</td>
<td><img src="image1" alt="View" /></td>
<td><img src="image2" alt="Listen" /></td>
</tr>
<tr>
<td>From Score: Sonata per pianoforte</td>
<td><img src="image3" alt="Score" /></td>
<td></td>
</tr>
<tr>
<td>Composer: Beethoven, Ludwig van</td>
<td><img src="image4" alt="Composer" /></td>
<td></td>
</tr>
<tr>
<td>From Recording:</td>
<td><img src="image5" alt="Recording" /></td>
<td></td>
</tr>
<tr>
<td>Performer:</td>
<td><img src="image6" alt="Performer" /></td>
<td></td>
</tr>
<tr>
<td>Publisher:</td>
<td><img src="image7" alt="Publisher" /></td>
<td></td>
</tr>
</tbody>
</table>

4 occurrences were found with the Work Title matching **Sonatas, piano, no. 17, op. 31, no. 2, D minor**

- the Creator matched **Beethoven, Ludwig van**
Variations2 Demo
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Variations2 Demo

This diagram of Chopin’s G minor Ballade is based on an analysis by Jim Samson in “Chopin: the four ballades” (Cambridge: Cambridge University Press), 1992.
Possible Future Directions

- Oncourse/Sakai-integration
  - quiz/test
  - assignment submittal
- Integration into full presentation framework
  - multimedia presentation for lecture
  - real-time interaction/modification
- Collaboration support, e.g. for online study groups
- Genetically improved syllabi
Quiz/Test Integration

Name that Composer

1. Who is the composer of this piece?
   - A. Brahms
   - B. Schubert
   - C. Mozart
   - D. Bach

Send
Noriko: It’s looking good.
James: I’m still not sure about the A4’ – can we listen again?
Karita: Sure. Why don’t you drive?
Multimedia Presentation

hyperserialism

- Pierre Boulez
  - Structures 1a
  - tone rows and rhythm rows

1952
Today’s Syllabi

Tuesday, Nov. 5  Schubert
Thursday, Nov. 7  The Mendelssohns
Tuesday, Nov. 12  The Schumanns
Thursday, Nov. 14  Brahms
Tuesday, Nov. 19  Wolf
Thursday, Nov. 21  The Mahlers
Tuesday, Nov. 26  Strauss

(paper syllabus)

Is there a better way?
Genetically-Improved Syllabii

- Week 8
  - Cavalieri, Emilio de'
  - Caccini, Giulio
  - Peri, Jacopo
  - Monteverdi, Claudio

- Week 9
  - Schütz, Heinrich
  - Lully, Jean Baptiste
  - Scarlatti, Alessandro
  - Purcell, Henri

- L'Incoronazione di Poppea, opera (excerpt), 1642, NAWM 57

- Week 10
- Week 11

Timeline:
- 1600
- 1650
- 1700
“The Task Force agreed unequivocally that the faculty, the library, and the IT and instructional design departments need to collaborate in developing sustainable and seamless infrastructure. ... very few institutions have systemically attained such a coherent strategic approach, principally because there is no common shared language on which to build strategic initiatives.”

- OCLC-sponsored task force

quoted in Lorcan Dempsey slideset, Libraries and the Enchantment of e-Learning
Other Challenges

- Client-side software installation
- Intellectual property issues
- Sustainability
- Building tools that will be adopted by more than early adopters
- Getting more content in
- Getting more metadata in
Broader Applicability?

Questions for discussion

- What other IU digital library projects have gone beyond access to address use?
- How have non-IU projects done this?
- What tools can be used across disciplines?
- Which opportunities offer the greatest ROI?
More Information

on Variations2
http://variations2.indiana.edu

contact me
mnotess@indiana.edu
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