ChoreoSave: Determining metadata for digital dance preservation

Eugenia S. Kim
Purdue University Libraries
eugeniakim@purdue.edu
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What is...?

Dance
“...it is impossible to define...”
- Curt Sachs, musicologist, 1937

- Dance is ephemeral, multi-faceted, and difficult to duplicate perfectly
- Choreography is not the same as Performance

Dance Preservation
- Historic problem, many solutions, no standard

Digital Dance Preservation
Working definition:
“The use of digital technology to record essential choreographic information for the recreation and reference of a dance work”

- Different organizations have different terms and definitions
- ‘Digital dance preservation’ is not the same as digitization
So what is a ‘dance work’?

Working Definition

“The overall collection of components related to a piece of choreography regardless of whether it was completed or made public”
The Primary Issue

Problem Statement
What are the necessary descriptive metadata elements to preserve a dance work in a digital repository?

Solution: *ChoreoSave*
A short-term preservation service for emerging choreographers who are not established artists affiliated with a major arts foundation.

Implementation
- **Open source** software, **cloud computing**, **open access**
- Inspired by **social media** video-sharing website interfaces
- **Peer-produced**: community contributes content, shapes service to its needs, not the administrators
- **Data curation**: dance work as data set
Past Practices

Traditional Methods

- Passing knowledge through generations
- Documentation
  - Notation (Labanotation, Benesh Movement Notation, etc.)
  - Print materials
  - Motion capture
  - Film and video

More Recent Developments

- Preserve, Inc. (Leslie Hansen Kopp)
- Dance Heritage Coalition
  Focus on Access, Documentation, Preservation, Education
  http://www.danceheritage.org/
- Merce Cunningham ‘capsule’
  http://www.merce.org/p/dance-capsules.php
- Siobhan Davies RePlay (Sarah Whatley)
  http://www.siobhandaviesreplay.com/
System Design Influences

Merce Cunningham Capsules

- Merce Cunningham ‘capsule’ includes
  
  “...performance videos, sound recordings, lighting plots, décor images, costume design, production notes from rehearsal and performance, and interviews with dancers and artistic staff (Cunningham Dance Foundation, 2009, p. 2).”

Siobhan Davies Replay

- Siobhan Davies choreography
- “...the UK’s first digital dance archive” (2007)
- Interactive online website
- Metadata elements include:
  - Title, Date, Choreographer, Music, Design, Garments, Lighting, Dance Artists, Musician, Summary, and Analysis
Preliminary Data Collection

About the Organizations

• Major non-profit institutions, dance companies, and libraries
• 13 were contacted, 7 responded
• All from the United States, mainly based in East Coast, one Midwest location
• Have an archivist, librarian, or other information professional on staff
• Surveyed June-July, 2010

Common Trends

• Required items:
  – printed materials
  – photographs
  – films and videos
• Ideal items:
  – Notations and scores
  – Any materials relevant to choreographer
  – Any materials related to the use and preservation of the choreography
• Other items
## Preliminary Data Collection

**TABLE I: Types of items for archiving dance choreography**

<table>
<thead>
<tr>
<th>Name of Item</th>
<th>Frequency</th>
<th>Percentage of Total Responses</th>
<th>Percentage of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holistic Approach</td>
<td>1</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>Music Scores and Media</td>
<td>1</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>Dance Scores</td>
<td>2</td>
<td>9%</td>
<td>29%</td>
</tr>
<tr>
<td>Lighting Cues and Designs</td>
<td>2</td>
<td>9%</td>
<td>29%</td>
</tr>
<tr>
<td>Production Information</td>
<td>2</td>
<td>9%</td>
<td>29%</td>
</tr>
<tr>
<td>Costume Sketches and Fabric</td>
<td>3</td>
<td>13%</td>
<td>43%</td>
</tr>
<tr>
<td>Films/Videos</td>
<td>4</td>
<td>17%</td>
<td>57%</td>
</tr>
<tr>
<td>Photographs</td>
<td>4</td>
<td>17%</td>
<td>57%</td>
</tr>
<tr>
<td>Printed Materials</td>
<td>4</td>
<td>17%</td>
<td>57%</td>
</tr>
</tbody>
</table>
Proposed Metadata Schema

Each element has a corresponding dance component

• Title*
• Movement Style
• Creation (Start) Date
• Official URL
• Related URLs
• Choreographer(s)*
• Description
• Choreography Notes
• Performers
• Title of Music*
• Composer/Recording Artist
• Musicians (for live and interactive performances)
• Additional Details Regarding Music
• Costume Designer(s), Staff

• Lighting Designer(s), Crew
• Lighting Description and Notes
• Set Designer(s), Crew
• Set Description and Notes
• Sound Designer(s), Crew
• Sound Description and Notes
• Stage Crew (Stage Manager, etc.)
• Photographer(s)
• Videographer, Editor, etc.
• Additional Technology Notes
• Live Performance Venues and Dates
• Recorded Performance Venues and Dates
• Funders
• Uncontrolled Keywords

* Indicates a required element
Metadata Entry Interface

Starred items indicate a required element
Pilot Test Results

User Feedback on Number, Utility, and Essentialness of Proposed Metadata Elements

<table>
<thead>
<tr>
<th>Metadata Element</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movement Style</td>
<td>4</td>
</tr>
<tr>
<td>Music/Song</td>
<td>3</td>
</tr>
<tr>
<td>Description</td>
<td>2</td>
</tr>
<tr>
<td>Number of Performers</td>
<td>1</td>
</tr>
<tr>
<td>Work Notes</td>
<td>1</td>
</tr>
</tbody>
</table>

Mixed Reactions

- Useful as tool (2)
- Would “eliminate many of the fields.” (1)
- Prototype might be “too much for a casual choreographer.” (1)

<table>
<thead>
<tr>
<th>User Feedback</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of metadata elements</td>
<td></td>
</tr>
<tr>
<td>Just enough metadata elements</td>
<td>3</td>
</tr>
<tr>
<td>Too many metadata elements</td>
<td>1</td>
</tr>
<tr>
<td>Utility of metadata elements</td>
<td></td>
</tr>
<tr>
<td>Elements are useful</td>
<td>1</td>
</tr>
<tr>
<td>Elements are somewhat useful</td>
<td>3</td>
</tr>
</tbody>
</table>
Future Development

• Collaboration with Purdue University

• Customized prototype

• Apply principles of data curation and related services to dance
  – Dance work as ‘data set’
  – Data Curation Profile
  – How does this research apply to digital humanities as a whole?