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Professor, Film and Media Studies

Heather Heckman
Director, Moving Image Research Collections

University of South Carolina
University Libraries
Featured Item

Cayce/West Columbia Christmas Parade--outtakes

We've heard that our friends at WIS television have been celebrating Joe Pinner's 50th anniversary as a WIS newsman, weatherman and all-round good citizen. We dug deep into our Local Television news collections to bring you this 1963 footage of Joe as "Mr. Knozit."

Congratulations, Joe, on 50 years of service to WIS and to Carolina!

(portions of this film have been slowed down)

Browse the Collection | View All Featured Items

1 of 2  next >
Development Timeline

- 1980 - The University Libraries launch a pioneering effort to create a computerized catalog for the Fox Movietone News Collection using software originally designed for medical professionals. The records created provide basic metadata incorporated into the MIRC-DVR.
- 1997 - The University Libraries explore IBM’s Cube technology to encode digital video.
- 2006 - The University Libraries design a tiered storage and online access environment for digitized versions of the archival film housed in the Newsfilm Library. Funding does not materialize.
- 2009 - To acknowledge the increased scope of its holdings, the Newsfilm Library is reorganized as Moving Image Research Collections. Senior University administration instigates a new round of planning to digitize the Fox Movietone News Collection.
- 2011 (Spring) - Limited internal funding is secured to support the creation of a pilot repository project. The planning team identifies and procures a package of hardware, open source software, and software development services. It sets a schedule to implement the repository in two phases. In phase one, the team will develop the basic content model architecture, conform metadata to the current pbCore standard, and provide broad access to a representative range of sample videos. In phase two, the project will implement crowd-sourcing for added metadata, social media connectivity, and a range of reporting and storage-layer enhancements.
- 2011 (Fall) - The University team begins working with Discovery Garden to implement phase one.
- 2012 (Summer) - MIRC-DVR becomes publicly available and work begins on improving the initial implementation.
- 2013 (Summer) - Second phase of development complete: Islandora 7, MyVideo functionality, Handle identifiers, and workflow improvements.
Planning Requirements: $$

- Maximize Longevity
- Minimize Recurring Costs
Planning Requirements: Preservation

Figure 4-3: Functions of Archival Storage
Film Preservation Transition

- Analog preservation
  - > $5/foot (outsourced)
  - + AC for 700-ish Years
  - Established standards and processes

- Digital preservation
  - <$1/foot (internal, after start-up)
  - Maintain infrastructure forever
  - New standards and protocols
## MIRC File Sizes

<table>
<thead>
<tr>
<th></th>
<th>DPX 4K 16bit B&amp;W</th>
<th>2.05 TB/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preservation Master</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mezzanine</strong></td>
<td>ProRes 4:2:2 4K</td>
<td>339 GB/hr</td>
</tr>
<tr>
<td><strong>Access</strong></td>
<td>h.264 @ 800 kbps</td>
<td>400 MB/hr</td>
</tr>
</tbody>
</table>
Preservation Goals

- OAIS compliance (incl. preservation metadata)
- Scalable storage infrastructure appropriate to filetypes and sizes
- Make digital surrogates
Planning Requirements: Production

MIRC Video Ingest Pathways
September, 2011

Bosh FDL 60 Telecine
SD NTSC component video

BetaSP / DigiBeta

Matrox MX02 Rack (w/Max)

Telecine Mac Pro #1
2.66 Ghz Quad Core
8 GB
2 x 1 TB
2 x 2 TB

Telecine Mac Pro #2
Black Magic Capture Card
2.8 Ghz, Quad Core
3 GB
2 x 1 TB

kinetta archival film scanner
2K+ Cineform

Capture PC (custom)
64 bit Asus motherboard
3 Ethernet; Dual Fiber (1 used)
StorNext FX; Cameralink Card
Windows 7 (64 bit) & Vista
2.5 TB on 3 Drives / 4 Bays

Telecine*Mac*Pro*#1
#2.66#Ghz#Quad#Core
#8#GB
2#x#1#TB
2#x#2#TB

Telecine*Mac*Pro*#2
Black Magic Capture Card
2.8 Ghz, Quad Core
3 GB
2 x 1 TB

Post-Production
Mac Pro
2.266 Ghz, Quad Core
8 GB
2 x 1 TB
2 x 2 TB

xSan
24 TB (usable)

Final Cut Server Management Zone

UTS (Off-Site) NAS
30TB

MIRC Video Ingest Pathways
September, 2011

= Fibre Channel + 2 ethernet min.

All workstations connected via ethernet to NAS and xServe FCS and FM Pro 11

Friday, July 12, 13
Production Goals

• Asset management
  • Easy access to low-res videos (even in absence of robust descriptive metadata)
  • Easy access to compressed hi-res mezzanines (for use in non-linear editing suites)
  • Access to uncompressed hi-res preservation masters (for relatively rare--but real--use cases)

• Asset reporting

• Minimal barriers to asset creation
  • Simple interfaces for descriptive metadata input automatic creation of technical & preservation metadata
  • Automatic transcoding & thumbnail creation
Access Goals

- Free, off-site access to low-res, watermarked video (alongside robust descriptive metadata)
- Free, off-site access to associated paper, still photo & audio materials
- Catalog functionality (search, browse, facets, record export)
- Durable linking & embedding
- End-user contributed metadata
- Time-based metadata
- OAI-harvesting
Content Model (original scoping)
Moving Image Research Collections

Always Coming Home project
Anna and Archer Huntington home movies
Apparent behavior collection
C. E. Feltner, Jr. collection
Chinese film collection
Fox Movietone News collection
Fredrick C. Adams home movies
Gambrell collection
Heyward Gibbes home movies
Houlis home movies
Itinerant filmmakers in South Carolina
Lever-Karst family home movies
Fox Movietone News collection

Contributors
Movietone News (Firm). (Creator)

Dates of Creation
Circa 1919-1944.

Scope and Content Note
The collection contains seven million feet of nitrate motion picture film and four million feet of safety motion picture film documenting the national and global politics and culture from 1919 through 1934 and from September 1942 through August 1944. Paper holdings provide detailed notes generated by original camera crews as well as ephemera related to individual stories. Within the collection are elements from two distinct newsreel products. One is a silent newsreel, Fox News, which ran from 1919 into 1930. The other is the original sound newsreel, Fox Movietone News, which ran from 1927 through 1963. The majority of films in the collection were not used by the Fox corporation as part of a released newsreel. The collection does contain over 200 released newsreels from 1942 to 1944.

Access
Portions of this collection may be viewed online; the remainder may be accessed upon request. Additional information about the items in this collection can be found in the MIRC Reference Catalog.

Subjects
Journalism
Sound motion pictures--History
World War, 1939-1945

Related Digital Collections
"African Americans Seen Through the Eyes of the Newsreel Cameraman," a digital exhibition of selected Fox Movietone films, is available through USC Digital Collections: library.sc.edu/digital/collections/fmmovietone.html

"Fox Movietone News: The War Years," a digital collection of selected Fox Movietone films and paperwork, is available through USC Digital Collections: library.sc.edu/digital/collections/mvtwafilms.html

Collection Members

"Gombey Men"--outtakes
"Mr. Zero" gives to the needy--outtakes
"National Colored Tournament"--outtakes
### Subject
- **Home movies** (4)
- **Wiseman, Lulu Belle, 1913-1999** (3)
- **Wiseman, Scotty, 1909-1981** (3)
- **Zoo animals** (3)
- **Amateur films** (2)
- **Brookgreen Gardens** (2)
- **Families** (2)
- **Lincoln Park (Chicago, Ill.)** (2)
- **New York Zoological Park** (2)
- **Zoo animals** (2)

### Collection
- **Lulu Belle and Scotty Wiseman home movie collection** (3)
- **Anna and Archer Huntington home movies** (2)
- **Fox Movietone News collection** (2)

### Date
- 1919 - 1980 (years)

### Search Results

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Temporal Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brookgreen Gardens and zoo--Huntington--home movies</strong></td>
<td>Brookgreen Gardens, featuring the wooden sign on the highway entrance, statues, construction, and the zoo. Animals include deer, turkeys, a bobcat, an otter, a bald eagle, an alligator, and pheasants.</td>
<td>Probably made between 1968 and 1979.</td>
</tr>
<tr>
<td><strong>Bronx Zoo--outtakes</strong></td>
<td>A day at the Bronx Zoo. Unidentified man surrounded by and describing Galapagos tortoises, man with a quail-headed stork, and fish being thrown to hungry sea lions.</td>
<td>Filmed on May 8th, 1928.</td>
</tr>
<tr>
<td><strong>Springtime for animals at the Bronx Zoo--outtakes</strong></td>
<td>Scenes from the Bronx Zoo, including a young brown bear in a pool, a big brown bear being fed by children, a polar bear, a woman feeding squirrels, a kinkajou eating ice cream, and yellow-footed wallabies.</td>
<td>Filmed on May 6, 1929.</td>
</tr>
<tr>
<td><strong>Chicago Zoo and Christmas--Wiseman--home movies</strong></td>
<td>This film shows a young Linda around Christmas, circa 1940. Linda is approximately two years old. Includes Lulu belle and Scotty pushing Linda in a stroller, a trip to the zoo, and Christmas scenes.</td>
<td>Probably filmed in late 1940.</td>
</tr>
<tr>
<td><strong>Ocean waves, boats, zoo--Phelps--home movies</strong></td>
<td>Home movie footage of international travel and possibly a trip to Hawaii. Scenes include ocean travel, a storm on the coast, cargo delivery via boat, street life, farm animals, and unidentified woman cooking to camera.</td>
<td></td>
</tr>
</tbody>
</table>
Springtime for animals at the Bronx Zoo--outtakes

Title
Springtime for animals at the Bronx Zoo--outtakes

Item Title
Fox News Story D1924...D1927

Temporal Coverage
Filmed on May 6, 1929.

Description
Scenes from the Bronx Zoo, including a young brown bear in a pool, a big brown bear being fed by children, a polar bear, a woman feeding squirrels, a kinkajou eating ice cream, and yellow-footed wallabies.

Silent or Sound
Silent

Subjects
Zoos.
Zoo animals.
New York Zoological Park.
Kinkajou.
Brown bear.
Kangaroos.

Geographical Coverage
Bronx (New York, N.Y.)

Temporal Coverage
Filmed on May 6, 1929.

Credits
Fox News (Production unit). Rody Green (Camera operator).

Donor
Twentieth Century-Fox Film Corporation

Copyright Statement
Copyright University of South Carolina. All rights reserved.

Access Statement

Physical Properties
Betacam SP; Color; Master

Access Statement

Physical Properties
Film: 35mm; Nitrate; B&W; Negative; 380 feet.
Fox Movietone News collection

Contributors
Movietonews (Firm). (Creator)

Dates of Creation
Circa 1919-1944.

Scope and Content Note
The collection contains seven million feet of nitrate motion picture film and four million feet of safety motion picture film documenting the national and global politics and culture from 1919 through 1934 and from September 1942 through August 1944. Paper holdings provide detailed notes generated by original camera crews as well as ephemera related to individual stories. Within the collection are elements from two distinct newsreel products. One is a silent newsreel, Fox News, which ran from 1919 into 1930. The other is the original sound newsreel, Fox Movietone News, which ran from 1927 through 1963. The majority of films in the collection were not used by the Fox corporation as part of a released newsreel. The collection does contain over 200 released newsreels from 1942 to 1944.
OBJECT MANAGEMENT

Select the Users and Roles that are allowed to manage this object. These users will also be able to view the object even if not explicitly allowed to in the object access section.

WARNING: If you unselect yourself you will be locked out of the object.

Users:
- anonymous
- blevewa
- cataloging-heather
- cooperating
- disciploid
- heckmanh
- MRPdupin
- MIRClammer
- mappasi
- sallen

Roles:
- administrator
- anonymous-user
- authenticated-user
- creator
- editor
- manager

- Enable XACML Restrictions on Object Viewing
- Enable XACML Restrictions on DSIDs and MIME types

Set Permissions
Content Model

Access Object
- PBCore instantiationDoc: text/xml
- DC: text/xml
- Thumbnail: image/jpg
- Externally Managed Video Asset: h.264

Mezzanine Object
- PBCore instantiationDoc: text/xml
- DC: text/xml
- Thumbnail: image/jpg
- Externally Managed Video Asset: ProRes

Preservation Master Object
- PBCore descriptionDoc: text/xml
- DC: text/xml
- Thumbnail: image/jpg
- Externally Managed Video Asset: DPX
"Gombey Men"--outtakes

Title
"Gombey Men"--outtakes

Item Title
Fox Movietone News Story 21-175

Production Dates
1934-02-05

Description
Bermudians perform the Gombey, a local folk dance in the Afro-Caribbean tradition, while a small band plays.

Subjects
Dance.
Bermuda Islands--Social life and customs.
Folk dance music--Bermuda Islands.
Production Dates
1934-02-05

Description
Bermudians perform the Gombey, a local folk dance in the Afro-Caribbean tradition, while a small band plays.
<table>
<thead>
<tr>
<th>SAMPLE POINT</th>
<th>ALL ASSETS</th>
<th>ACCESS COPIES</th>
<th>MEZZANINES</th>
<th>PRESERVATION MASTERS</th>
<th>ACCESSIBLE TITLES</th>
<th>IN PROGRESS TITLES</th>
<th>TOTAL TITLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/27/2013 - 20:54</td>
<td>2.83 TB in 873 assets</td>
<td>17.5 GB in 423 assets</td>
<td>2.76 TB in 448 assets</td>
<td>54.8 GB in 2 assets</td>
<td>415 unique titles</td>
<td>199 unique titles</td>
<td>614 unique titles</td>
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<tr>
<td>06/21/2013 - 00:00</td>
<td>2.81 TB in 857 assets</td>
<td>17.28 GB in 417 assets</td>
<td>2.74 TB in 438 assets</td>
<td>54.8 GB in 2 assets</td>
<td>413 unique titles</td>
<td>173 unique titles</td>
<td>586 unique titles</td>
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<tr>
<td>05/01/2013 - 00:00</td>
<td>2.78 TB in 830 assets</td>
<td>16.99 GB in 404 assets</td>
<td>2.71 TB in 424 assets</td>
<td>54.8 GB in 2 assets</td>
<td>407 unique titles</td>
<td>153 unique titles</td>
<td>560 unique titles</td>
</tr>
<tr>
<td>04/01/2013 - 00:00</td>
<td>2.71 TB in 745 assets</td>
<td>14.97 GB in 362 assets</td>
<td>2.64 TB in 381 assets</td>
<td>54.8 GB in 2 assets</td>
<td>362 unique titles</td>
<td>133 unique titles</td>
<td>495 unique titles</td>
</tr>
<tr>
<td>03/01/2013 - 00:00</td>
<td>2.28 TB in 621 assets</td>
<td>12.69 GB in 301 assets</td>
<td>2.26 TB in 319 assets</td>
<td>5.5 GB in 1 asset</td>
<td>325 unique titles</td>
<td>105 unique titles</td>
<td>430 unique titles</td>
</tr>
<tr>
<td>02/01/2013 - 00:00</td>
<td>2.15 TB in 606 assets</td>
<td>12 GB in 293 assets</td>
<td>2.13 TB in 312 assets</td>
<td>5.5 GB in 1 asset</td>
<td>315 unique titles</td>
<td>83 unique titles</td>
<td>398 unique titles</td>
</tr>
<tr>
<td>01/01/2013 - 00:00</td>
<td>2.12 TB in 603 assets</td>
<td>11.95 GB in 292 assets</td>
<td>2.11 TB in 311 assets</td>
<td>0 bytes in 0 assets</td>
<td>304 unique titles</td>
<td>23 unique titles</td>
<td>327 unique titles</td>
</tr>
<tr>
<td>12/01/2012 - 00:00</td>
<td>2.1 TB in 599 assets</td>
<td>11.84 GB in 290 assets</td>
<td>2.08 TB in 309 assets</td>
<td>0 bytes in 0 assets</td>
<td>303 unique titles</td>
<td>16 unique titles</td>
<td>319 unique titles</td>
</tr>
<tr>
<td>11/01/2012 - 00:00</td>
<td>2.08 TB in 597 assets</td>
<td>11.75 GB in 289 assets</td>
<td>2.06 TB in 308 assets</td>
<td>0 bytes in 0 assets</td>
<td>298 unique titles</td>
<td>16 unique titles</td>
<td>314 unique titles</td>
</tr>
<tr>
<td>10/01/2012 - 00:00</td>
<td>1.97 TB in 583 assets</td>
<td>11.25 GB in 282 assets</td>
<td>1.96 TB in 301 assets</td>
<td>0 bytes in 0 assets</td>
<td>284 unique titles</td>
<td>16 unique titles</td>
<td>300 unique titles</td>
</tr>
<tr>
<td>09/01/2012 - 00:00</td>
<td>1.96 TB in 581 assets</td>
<td>10.88 GB in 281 assets</td>
<td>1.95 TB in 300 assets</td>
<td>0 bytes in 0 assets</td>
<td>283 unique titles</td>
<td>13 unique titles</td>
<td>296 unique titles</td>
</tr>
<tr>
<td>08/01/2012 - 00:00</td>
<td>1.62 TB in 527 assets</td>
<td>9.55 GB in 254 assets</td>
<td>1.61 TB in 273 assets</td>
<td>0 bytes in 0 assets</td>
<td>262 unique titles</td>
<td>3 unique titles</td>
<td>265 unique titles</td>
</tr>
<tr>
<td>07/01/2012 - 00:00</td>
<td>1015.02 GB in 314 assets</td>
<td>5.28 GB in 146 assets</td>
<td>1009.74 GB in 168 assets</td>
<td>0 bytes in 0 assets</td>
<td>145 unique titles</td>
<td>0 unique titles</td>
<td>145 unique titles</td>
</tr>
<tr>
<td>Label</td>
<td>Operations</td>
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<td></td>
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</tr>
<tr>
<td>----------------------------------------------------------------------</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uproar in Heaven</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caribbean Cruise--Nixon--home movies</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Las Vegas story--Nixon--home movies</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trains--Nixon--home movies, Guelph Junction.</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nixon 31, MCLS 3330</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthracite coal mines--outtakes</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBTW-TV News Story 6122</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Yokohama celebrates the coming Imperial coronation--outtakes</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional starving man--outtakes</td>
<td>Remove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Export**

**Format**

- Export type -

- Export selected MyVideos
- Export all MyVideos

**Share**

MyVideo list is not shared with other users.

- Select user -
- Share
Storage Challenges

- 220 TB of mirrored storage on Gluster clusters
- Only 100 hours of DPX assets!
- Fixity checking & policy-based management pending
- Off-site backup for disaster recovery pending
What we have

• For access (in phase 1, with some improvements in phase 2):
  • Free, off-site access to low-res, watermarked video (alongside robust descriptive metadata)
  • Catalog functionality (search, browse, facets, record export)

• For production (in phase 2):
  • Nearly everything!

• For preservation (in phase 1):
  • A handful of digital surrogates
  • Basic Fedora infrastructure to manage them
  • ... But not much else ...
Trade-offs

- Access before preservation (barriers to digital access are lower & access copies promote preservation)
- MIRC users before MIRC internal staff (staff get paid for the time they spend with the DVR)
- OPAC-style discovery before the rest (urgently need basic functionality to replace legacy systems)
- Custom solutions before out-of-the-box solutions (use start-up money for the hard part)
What we’re working on:

• Access:
  • Free, off-site access to associated paper, still photo & audio materials
  • Durable linking & embedding
  • End-user contributed metadata
  • Time-based metadata
  • OAI-harvesting

• Production:
  • Incremental improvements to existing workflows & interfaces, as needed

• Preservation:
  • Nearly everything!