

A/V Preservation - Metadata

Good metadata is the key to effective digital preservation

- Without metadata, materials may be lost
- Metadata makes materials much more usable

Important to go with standards

- Widely used, help ensure future compatibility
- ISO, AES, NIST, ANSI, LOC, NARA

Most serious metadata implementations involve XML

- Do not use embedded metadata, it is very unreliable
- Best way to grasp something like this is to speak with people who have experience, and work with your IT people

A/V Preservation - Metadata

Metadata basics

- What metadata should be collected?
- What standards will be applied?
- What are the most immediate fields for your project and for long-term accessibility?
- Are future formats considered?

A/V Preservation - Metadata

Suggested metadata schemas:

- **TEI (Text Encoding Initiative):** guideline for encoding machine-readable (in the fields of humanities and social sciences). Used to describe the structural hierarchies, divisions, and characteristics of a given file (audio/video).
- **PBCore**— Public Broadcasting Metadata Dictionary (PBCore) is made up of elements, which can be organized into three main groups: Root Elements, Asset Elements, Instantiation Elements. Elements are a way to structure information based on what type of information it is. PBCore is designed for born digital formats, particularly for technical metadata.
- **METS** - Metadata Encoding and Transmission Standard identified the structural metadata found in audio/video file formats. METS is a “wrapper” with a number of elements which provide a hierarchical structure for oral history files.

A/V Preservation - Metadata

Suggested metadata schemas:

- **MODS (Metadata Object Description Schema):** an XML-based bibliographic description schema developed by the United States Library of Congress' Network Development and Standards Office. MODS was designed as a compromise between the complexity of the MARC format used by libraries and the extreme simplicity of Dublin Core metadata.
- **PREMIS (Preservation Metadata: Implementation Strategies)**– is a metadata standard for recording information required for preservation of digital objects. The standard's documentation and metadata schema are hosted by the Library of Congress.
- **METS - Metadata Encoding and Transmission Standard** identified the structural metadata found in audio/video file formats. METS is a “wrapper” with a number of elements which provide a hierarchical structure for oral history files.

A/V Metadata

- **Descriptive:** the information describing the media itself, the persons present, as well as keywords and other content information
- **Administrative:** any information about an institution that holds the media. This is significant if you are collecting oral history in partnership with a university or other institution.
- **Preservation:** information about the physical condition of the recording, and any copies that have been made of it. You may need to record this metadata when you make multiple backup copies. This also includes Provenance Metadata (original file format specifications). **Signal Metadata- Raw VBI Interface** – This includes noting the gaps or error gaps in the sequence of lines of an analog video signal.
- **Technical:** information about the “physical and technical properties of the digital object.” This means the file type and size of your recording, or information about which devices you used to record it.
- **Rights and access:** information about ownership and copyright, especially the nature of the consent given by the media.

A/V Preservation – Descriptive Metadata

Example #1

Descriptive Metadata	
Title	Interview with Annie Milne
Creator	J.A. Pryse and Rachel Jinks
Item unique ID	OH2020.002.01
Collection	Milne Family Collection
Date of creation	2/2/1992
Place of creation	University of Oklahoma Library, Floor 2 Learning Lab, Room 404
Language	English (eng)
Publisher	Oklahoma History Publication Society
Description	Interview with Annie Milne, granddaughter of the George Milne, Steel Manufacturer in Oklahoma about her time on the Milne Estate from the periods of 1913-1929.
Subjects	people – individuals; steel; Oklahoma; biographies; oral histories; interviews; Milne, Annie
Coverage	United States – Oklahoma
Start and End Dates	1913-1929

A/V Preservation – Preservation Metadata

Preservation Metadata	
Format	VHS
Gauge (magnetic tape)	½ inch
Length-extent	45 minutes
Stock brand	Ampex
Stock duration	60 minutes
Signal encoding	SP
Original labels or markings	“Annie – 3 rd generation”
Original copies	1 single tape
Migration series	Super 8 film to VHS (2001); VHS tape to .AVI (2019)

A/V Preservation – Embedded Metadata

Embedded Technical Metadata	
Video format	YUV-AJA Video Systems Xena
Video Codec ID	V210
Video Bit Rate	221184000
Video Width	720
Video Height	480
Video Standard	NTSC
Video Colorspace	YUV
Video Frame Rate	29.97
Audio Format	PCM
Audio Codec ID	PCM
Audio Bit Rate	1536000
Audio Bit Depth	16
Audio Sampling Rate	48000
Audio Resolution	16
Format Extensions	.mp4, .m4v, .m4a, .m4p, .3gpp, .3gp, .3gpp2, .3g2, .k3g, .jpm, .jpx, .mqv, .ismv, .f4v
MIME Type:	
Format Version	3
File Size	168GB
Duration	00:48:13:02
File Migration Date(s)	Super 8 film to VHS (2001); VHS tape to .AVI (2019)
Encoded Date	1/28/2020

A/V Preservation – Non-Embedded Metadata

Non - Embedded Technical Metadata	
Computer Manufacturer	Apple, Inc
Host Computer/model	iMac
Host Computer/version	Power PC
Host Computer Build	iMac14.2
Operating System	macOS Mojave
Operating System Version	10.14.6
Video Reproduction Device Type	VHS
Video Reproduction Manufacturer	Sony
Video Reproduction Device Model Name	SVO
Video Reproduction Device Model Version	1.25.369v4
Video Reproduction Device Model Serial	596203962
Video Capture Device Type 1	Analog to Digital Converter
Video Capture Device Manufacturer	Blackmagic
Video Capture device Model Name 1	Decklink Studio 2
Video Capture Device Model Version	2
Video Capture Device Model Serial Number	98573920
Video Capture Software	Blackmagic Video Capture
Video Capture Device Driver Version	2.3
Video Capture Software Manufacturer	Blackmagic
Video Capture Software	Adobe Premiere Pro
Video Capture Software Version	14.0.2

A/V Preservation – Rights and Access Metadata

Rights and Access	
Rights Declaration	Owner
Rights Holder Name	Annie Milner
Rights Holder Contact Designation	Annie Milner, Estate
Rights Holder Contact	Email – Amilner@aol.com
Rights Declaration	Owner
Rights Holder Name	Annie Milner
Rights Holder Contact Designation	Annie Milner, Estate
Rights Holder Contact	Email – Amilner@aol.com

A/V Preservation – Postproduction Metadata

Transcription Metadata	
Script Statement	Annie Milne
Script Date	4/2/1992
Recording Statement	VHS recording made by J.A. Pryse and Rachel Jinks from the Oklahoma History Publicans Society, available as VHS transfer and audio cassette, 4/2/1992
Transcription Service	YAYAs Transcription Service
Transcription Equipment	Multiple close microphones mixed down to stereo Digital Audio Tape, standard play, 44.1 KHz sampling frequency
Transcription Metadata	
Closed Captions	Captioning oral histories has become standard in order to reach the public who are deaf, hard of hearing, or speak English as a second language

Subject Transcription Metadata	
Title	Time
Introduction – Where did you grow up?	00:00:17
Background – Who were your parents and relationship to George Milne?	00:09:08
Background – When did you visit the Milne Estate	00:19:10
Background - Did you visit the Steel Company in Oklahoma?	00:29:22
Employment – When were you hired at the Steel Company?	00:42:57
Death of George Milne – You inherited the Steel Company in what year and do you still own this company?	00:46:00

A/V Preservation – Postproduction Metadata

Transcription Metadata	
Script Statement	Annie Milne
Script Date	4/2/1992
Recording Statement	VHS recording made by J.A. Pryse and Rachel Jinks from the Oklahoma History Publicans Society, available as VHS transfer and audio cassette, 4/2/1992
Transcription Service	YAYAs Transcription Service
Transcription Equipment	Multiple close microphones mixed down to stereo Digital Audio Tape, standard play, 44.1 KHz sampling frequency
Transcription Metadata	
Closed Captions	Captioning oral histories has become standard in order to reach the public who are deaf, hard of hearing, or speak English as a second language

Subject Transcription Metadata	
Title	Time
Introduction – Where did you grow up?	00:00:17
Background – Who were your parents and relationship to George Milne?	00:09:08
Background – When did you visit the Milne Estate	00:19:10
Background - Did you visit the Steel Company in Oklahoma?	00:29:22
Employment – When were you hired at the Steel Company?	00:42:57
Death of George Milne – You inherited the Steel Company in what year and do you still own this company?	00:46:00