

# Preservation Metadata: Adapting or Adopting PREMIS for APSR

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**and**  
**National Library of Australia**

iPRES 2006, Cornell University, October 2006

# Outline

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- APSR
- PREMIS Requirements Statement project (PRESTA)
- Project products:
  - ▶ List of preservation metadata elements
  - ▶ File formats
  - ▶ Tools for automated metadata collection
  - ▶ Gap reports
  - ▶ Preservation Event use cases
  - ▶ Profile for exchanging metadata

# APSR

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- Centre of excellence for the management of scholarly assets in digital format
- Focus on access continuity and sustainability
- Demonstrator repositories
- Develop skills and expertise
- National outreach and international linkages



# Outline

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## ✓ APSR

### PREMIS Requirements Statement project (PRESTA)

#### Project products:

- List of preservation metadata elements

- File formats

- Tools for automated metadata collection

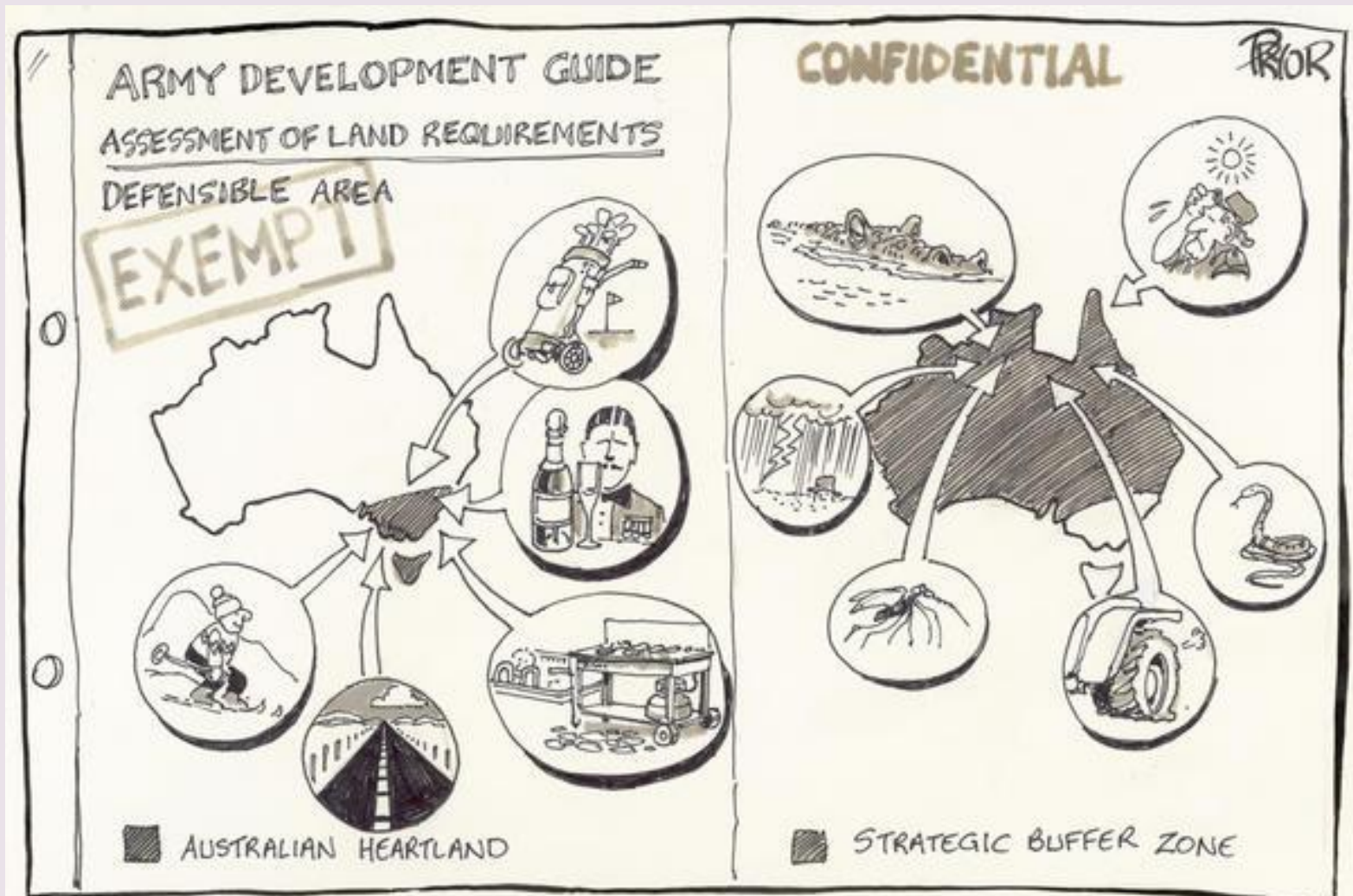
- Gap reports

- Preservation Event use cases

- Profile for exchanging metadata

Pryor, Geoff, 1944-

Army development guide, assessment of land requirements [picture] 1985



# PREMIS Requirements Statement (PRESTA)

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- Aim:
  - ▶ To specify requirements for the collection of metadata for preservation management based on PREMIS and help these be applied to selected partner repository implementations

# PREMIS Requirements Statement (PRESTA)

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- Draft work plan late 2005
- Analysis Dec 2005 - Jun 2006
  - ▶ National Library of Australia
- Report completed Jul 2006
- Selected repositories:
  - ▶ Australian National University (ANU) (DSpace)
  - ▶ University of Queensland (UQ) (Fez/Fedora)



# Project approach

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- ANU and UQ repositories already established with DSpace and Fedora models
- More emphasis on *what* metadata should be collected than on *how* it is collected
- Identify gaps and recommend enhancements
- Preservation event use cases and requirements *were* written as this was a significant gap.
- Preservation monitoring being addressed by AONS project



## Project approach

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- "Implements" PREMIS in two ways:
  - ▶ uses the Data Dictionary as a checklist against which repositories can compare their preservation metadata
  - ▶ uses the PREMIS schemas in a METS profile for exchanging preservation metadata (concrete framework for implementing PREMIS)

# Outline

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- ✓ APSR
- ✓ PRESTA - PREMIS Requirements Statement project

## Project products:

List of preservation metadata elements

File formats

Tools for automated metadata collection

Gap reports

Preservation Event use cases

Profile for exchanging metadata

Sawyer, Harry G. (Henry George), 1903-  
My Watkins **Products** van, [Boronia, 1940s?] [picture]



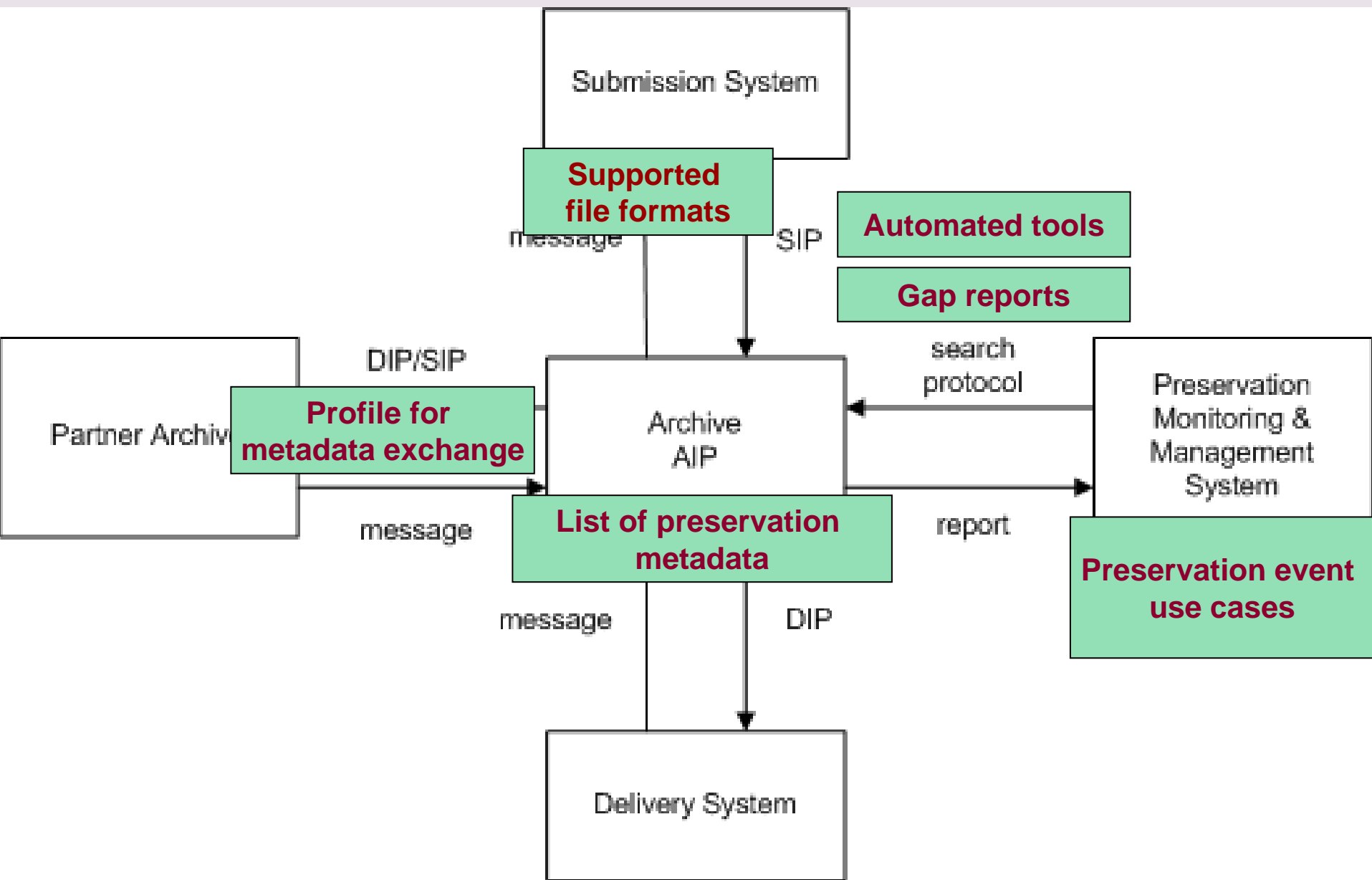
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# Project products

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1. List of preservation metadata elements
2. Supported file formats
3. Tools for automated metadata collection
4. Gap reports for ANU and UQ (May 2006)
5. Preservation event use cases and requirements (history logging)
6. Draft METS profile for exchanging metadata

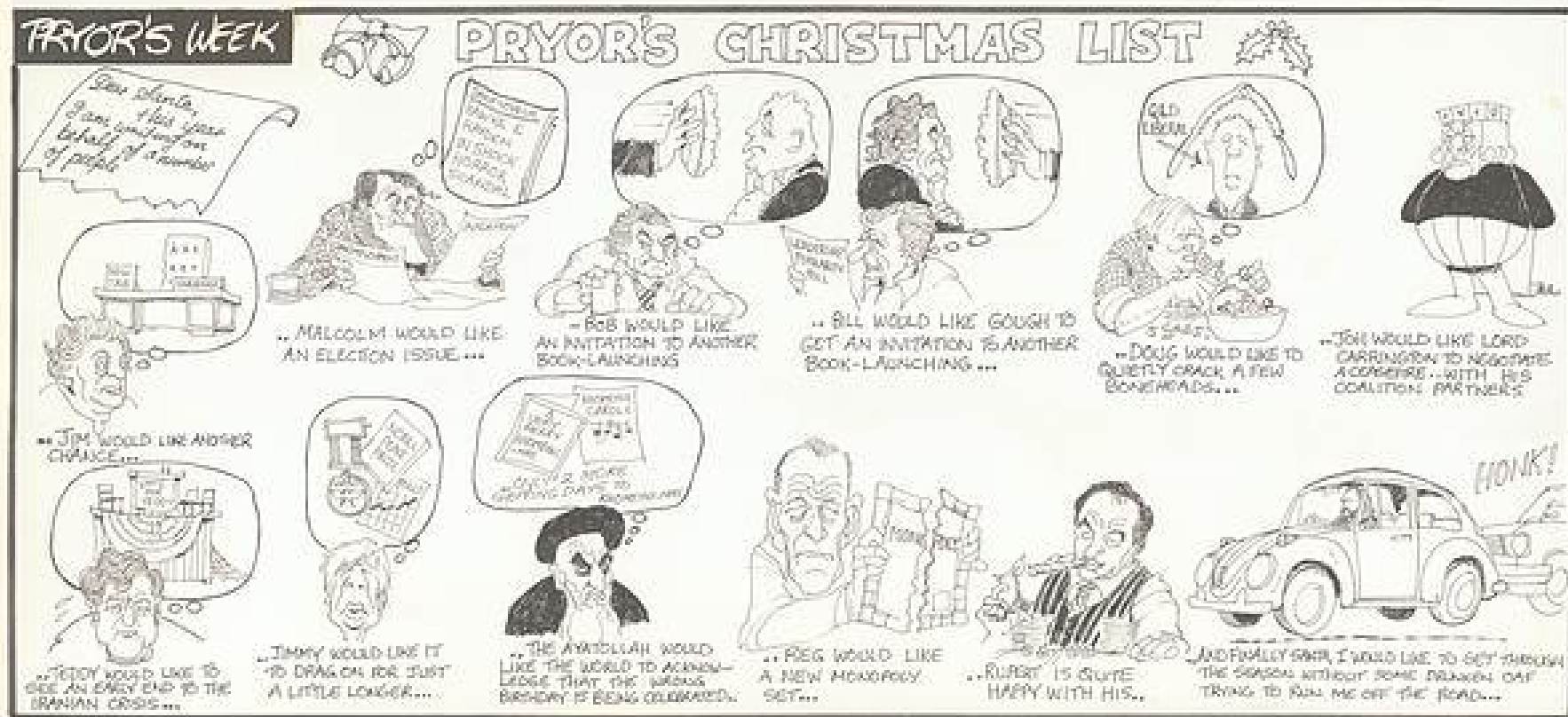


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Pryor, Geoff, Pryor's Christmas List [Malcolm Fraser, Bob Hawke, Bill Hayden, Doug Anthony, Joh Bjelke-Petersen, Ted Kennedy, Jimmy Carter, Ayatollah Khomeini, Rupert Murdoch] [picture] 1979



# List of preservation metadata elements

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- Scenarios - "just in case" metadata?
- All the metadata required for long term sustainability and meaningful access
  - ▶ PREMIS Object, Event, Agent
  - ▶ Descriptive metadata (Intellectual Entity)
  - ▶ Structural metadata
  - ▶ Format specific metadata e.g. image, audio
  - ▶ Access rights metadata
- Collect as much as possible automatically
- Accept that some metadata unobtainable



## "Mandatory" PREMIS metadata

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- Things a repository should know about *every* archival object
- Doesn't specify how metadata is stored
- If not stored explicitly for each object it should be documented explicitly somewhere e.g. in policy or procedures

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Sievers, Wolfgang, 1913-  
Tape **file** cabinet [at]  
Remington Rand, South  
Melbourne, [Victoria],  
1968 [picture]

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## File formats

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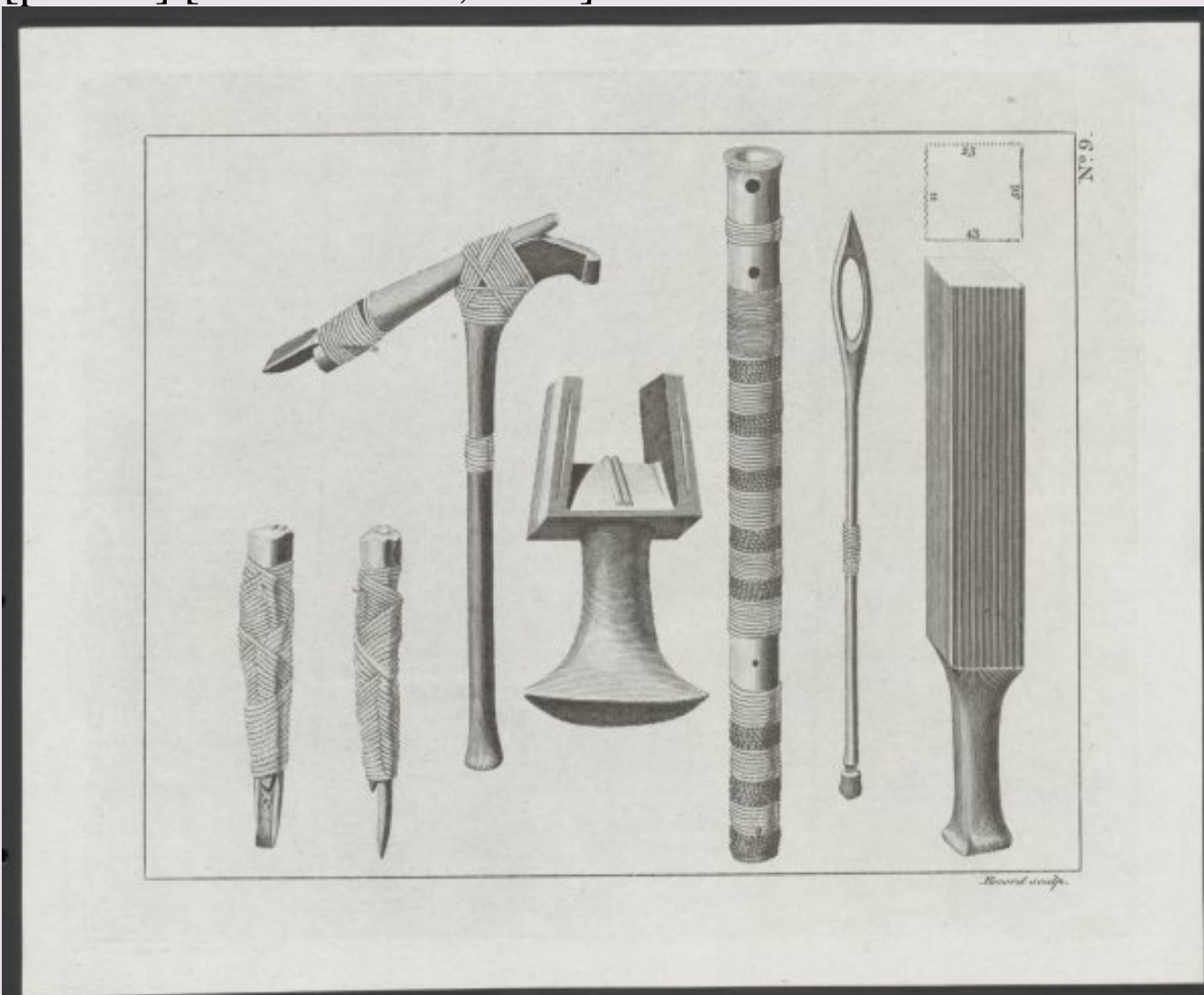
- Comments on images, audio, video, text
- Brief comments on databases, PDF, websites, multimedia, others
- Recommended archival formats
- Formats in common usage likely to be accepted e.g. digital camera formats
- Unsupported formats (should be converted to archival format)

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Record, John, fl. 1768-1780. [**Tools** and instruments from the Society Islands]  
 [picture] [London : s.n., 1773]



# Automated tools

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- Tools for identifying file formats and automatically extracting metadata
- JHOVE, DROID, NLNZ Preservation Metadata tool
- Evaluation of capabilities
- Examples of output from the tools are linked to the report

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Howard, Bruce, 1936-, Bridging the **gap** : the Gisborne By-Pass Road under construction 40km north of Melbourne, 1989 [picture], [Melbourne] : Herald and Weekly Times, 1989.



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## Gap reports for ANU, UQ

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- Level of support (at May 2006) for core preservation metadata (i.e.PREMIS)
- Most significant gaps:
  - ▶ recording of preservation events
  - ▶ recording of structural relationships
  - ▶ file format validation (ANU)
  - ▶ checksum generation (UQ)

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Seselja, Loui, 1948- Scoreboard, equestrian individual three day **event** jumping, Horsley Park, Sydney 2000 Olympic Games, 22 September 2000 [picture]



## Preservation Event use cases

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1. Performing an action on an object which doesn't change the object e.g. error checking
2. Performing an action on an object which transforms the object into a new object e.g. migration to a newer format
3. Deleting an object

## Preservation Event use cases

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4. Updating the content of an object (not preservation but included for clarification)
5. Updating metadata about an object

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Hurley, Frank, 1885-1962. Eating gum tips, koala **profile** [picture] : [Taronga Park Zoo, Sydney, New South Wales] [between 1910 and 1962]



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## Draft profile for exchanging metadata

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- METS profile for transferring custody of an object (needs most metadata)
- Common profile for different systems to map to
- Uses MODS, PREMIS, MIX, other format specific schemas

## Draft profile for exchanging metadata

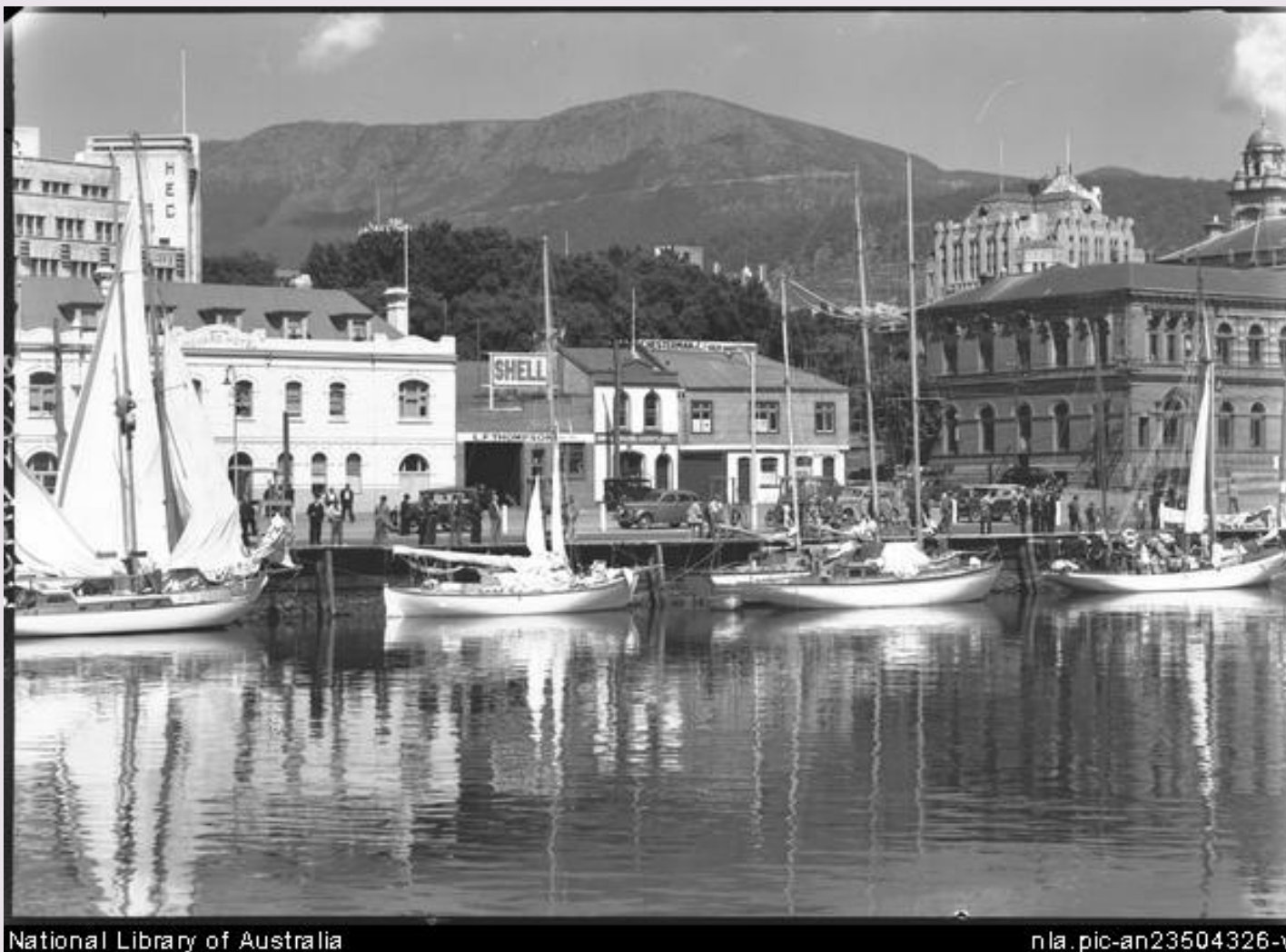
- Using the draft profile ANU and UQ have built a demonstrator which transfers a digital object between DSpace and Fedora.
- Demonstrated that the receiving repository is able to understand, store and use the imported metadata.
- Draft profile in report is early thinking
- It is being revised in the light of ANU and UQ feedback and what others in PREMIS and METS groups are doing

## Conclusion

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- 14 recommendations
- Report published on APSR website - follow the Publications link
- <http://www.apsr.edu.au/publications/PRESTA/>
- Repositories and our thinking are continuing to evolve

Hurley, Frank, 1885-1962. [Sea-going yachts in Constitution Dock at the **conclusion** of the annual Sydney to Hobart yacht race] [picture] : [Hobart, Tasmania] [between 1910 and 1962]



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