APPLYING INHERITANCE
SINGLE-LEVEL DISPLAYS AND REPURPOSEABLE METADATA

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Hierarchical Description and Inheritance

Archival description standards require that information provided at higher levels of hierarchical descriptions not be repeated at lower levels. These descriptive elements are assumed to be inherited by subordinate units in multi-level finding aids.

In most document-centric display systems inheritance is implicit, relying on the user to interpret and contextualize the descriptive elements to make the description of any given subordinate level understandable and complete.

Collection-level description

Identifier: UA 1119
Title: Dept. of Technology Records, 1955-1988
Creator: Brigham Young University. Dept. of Technology
Repository: L. Tom Perry Special Collections
Extent: 8 boxes (3.75 linear ft.)
Access: Restricted. Closed for 25 years after date of creation.
Language: English
Scope/Content Note: Collection contains a variety of documents related to the Department of Technology, including correspondence and memoranda...

Series-level description

Identifier: UA 1119 Series 1
Title: Department Correspondence and Meeting Minutes, 1963-1988
Creator: Brigham Young University. Dept. of Technology
Repository: L. Tom Perry Special Collections
Extent: [4 boxes (from inventory)]
Access: Restricted. Closed for 25 years after date of creation.
Language: English
Scope/Content Note: [Series note varies from collection based on review of inventory]

Inherited information shown in gray.

Inheritance can improve efficiency when describing materials, while providing a human-readable tool for patrons accessing the material. Although problems may occur (as above), most users will interpret the document correctly.

However, in a computer-processable environment, explicit data is required. Implied, contextual descriptions do not provide adequate data to enable other uses of the metadata recorded in the finding aid.

Single-level Displays

Inheritance is especially important for finding aid publication platforms based on single-level views of the collection. In applications such as PLEADE and ICA-AtoM, a single component is viewed at a time, together with contextual pointers to the patron's relative position in the hierarchical description. But these systems have not taken full advantage of inherited data, leaving users with truncated descriptions.
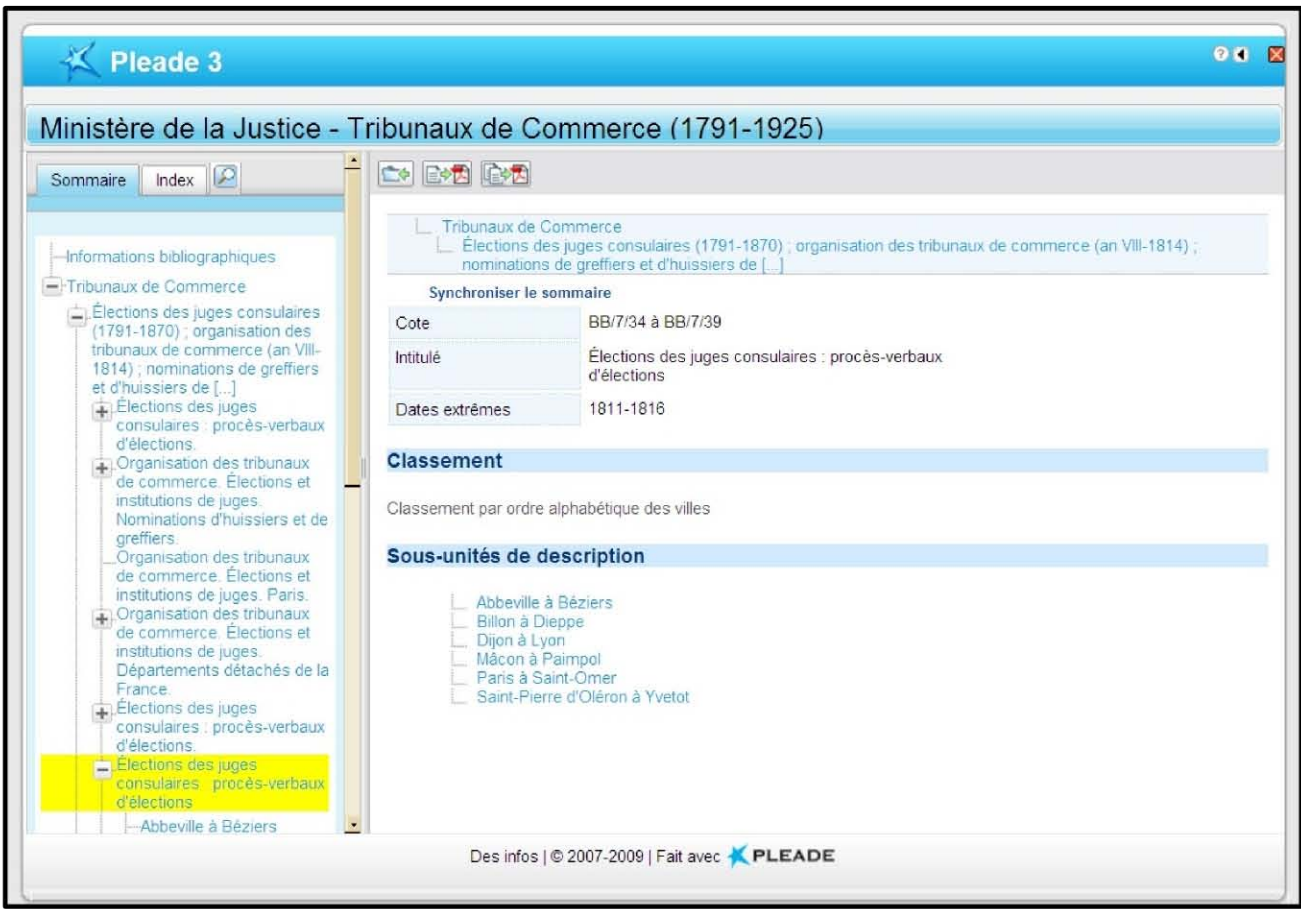
Single-level displays in PLEADE and ICA-AtoM
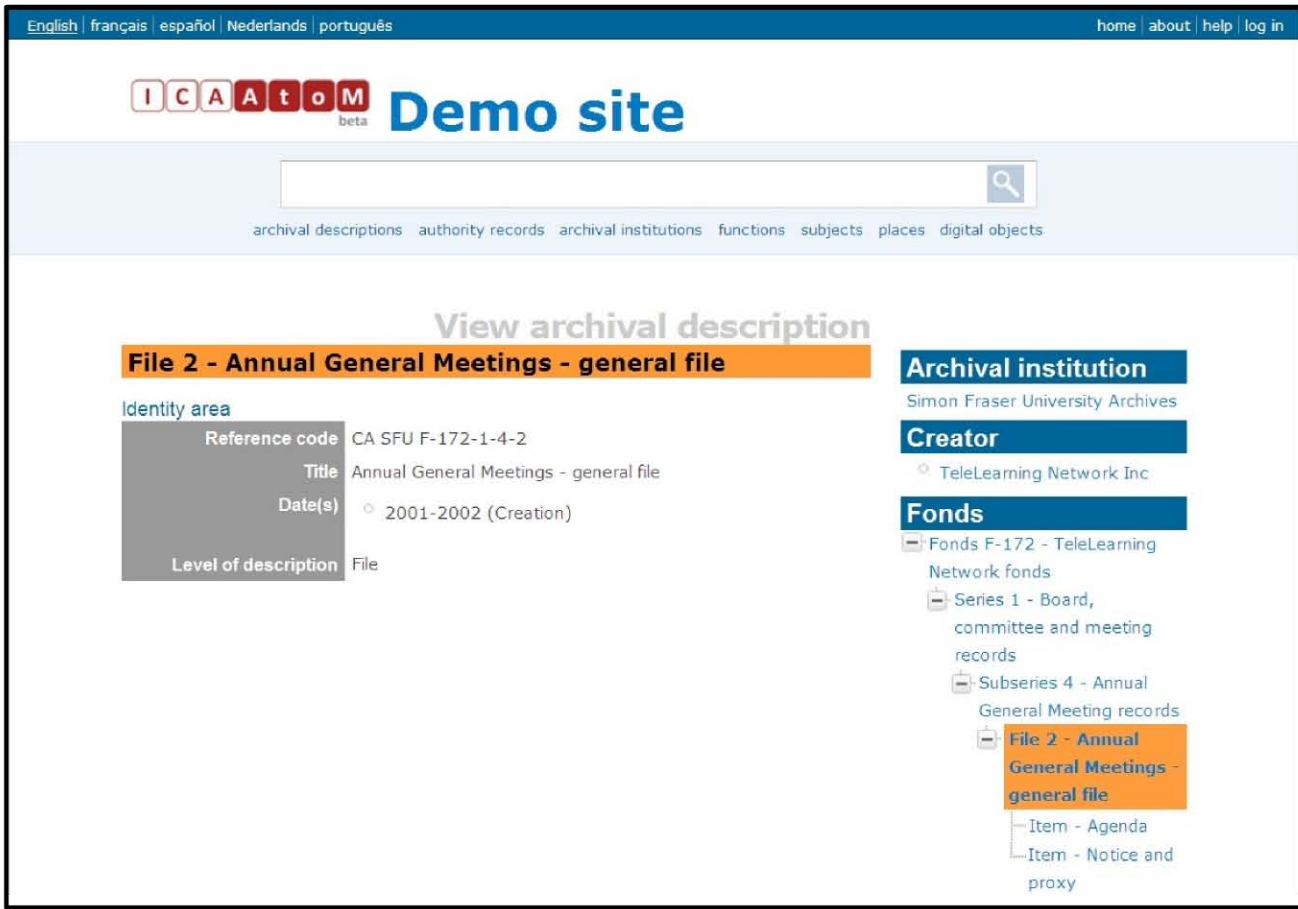
By developing data and systems that can fully leverage inheritance, single-level displays become more user-friendly and understandable to the user. The new finding aids database developed at Brigham Young University demonstrates the potential of using inheritance in displays.
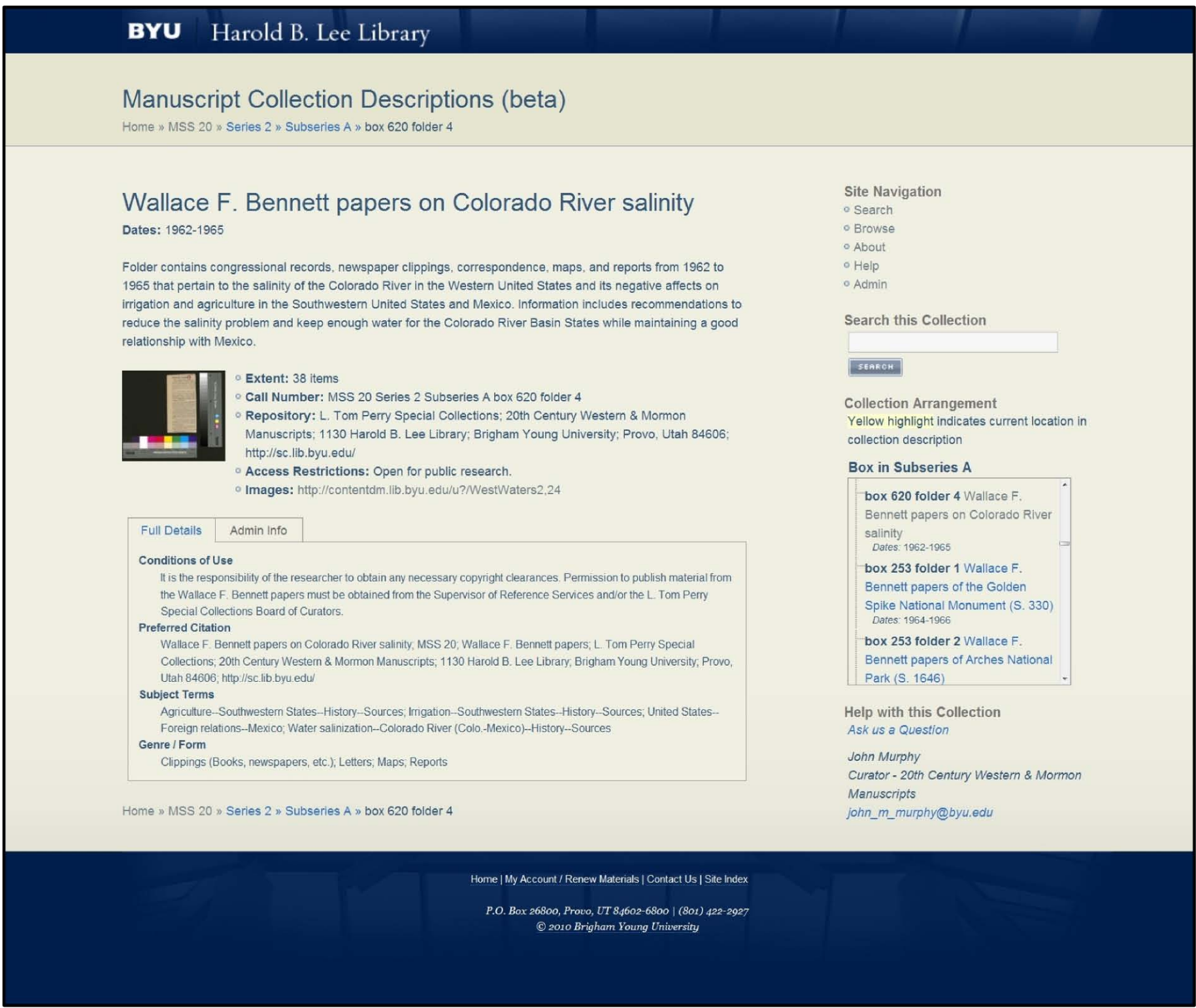
Brigham Young University finding aids database (http://findingaid.lib.byu.edu/)

Repurposing Descriptive Metadata

Creating descriptions that enable inheritance also improves reuse of finding aid metadata. Elements from superior hierarchical components may be incorporated in the descriptions of subordinate components, resulting in richer derivative records.

EAD component description

```
...
<c03>
  <did>
    <unitid>UA 1119 Series 1 Box 1 Folder 1-3</unitid>
    <container type="box">1</container>
    <container type="folder">1-3</container>
    <unittitle>Department of Technology chairman's memorandums</unittitle>
    <unitdate>1985-1987</unitdate>
    <physdesc>
      <extent>3 folders</extent>
    </physdesc>
    <langmaterial>
      <language>English</language>
    </langmaterial>
    <repository>
      <corpname>L. Tom Perry Special Collections</corpname>
    </repository>
  </did>
  <accessrestrict>
    <p>Restricted. Closed for 25 years after date of creation.</p>
  </accessrestrict>
</c03>
...
```

Derivative Dublin Core record

```
...
<oai_dc:dc>
  <dc:identifier>UA 1119 Box 1 Folder 1-3</dc:identifier>

  <dc:title>Department of Technology chairman's memorandums</dc:title>
  <dc:date>1985-1987</dc:date>
  <dc:format>3 folders</dc:format>

  <dc:language>English</dc:language>

  <dc:publisher>L. Tom Perry Special Collections</dc:publisher>

  <dc:rights>Restricted. Closed for 25 years after date of creation.</dc:rights>
  <dc:source>UA 1119 Series 1</dc:source>
  <dc:identifier>http://archive.edu/UPB_MSS1119#Box1_Folder1-3</dc:identifier>
</oai_dc:dc>
...
```

Generated values based on inheritance shown in gray.

Data in archival descriptions must be provided explicitly to enable inheritance, and for the creation of derivative records. Following descriptive practices that enable the creation of such records will result in clearer descriptions and greater opportunities for the creative reuse of our metadata.