

BIBFRAME AV Assessment: Appendix G - Example Film Resources (Film-physical and Film-file)

AVPreserve, 23 September 2015 (revised January 4, 2016)

The resources featured in this scenario are two instances of the work *Gone With the Wind* (Resource9). Resource10 is a positive distribution print of the 1954 release of the film. In 2014, the institution holding the print scanned the film for preservation purposes, creating a DPX object (Resource11).

Note that this example uses the BIBFRAME vocabulary 1.0 as it existed in February 2015.

```
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix bf: <http://bibframe.org/vocab/> .
@prefix bfe: <http://bibframe.org/vocabExtended_toBeDone/> .
@prefix ebucore: <http://www.ebu.ch/metadata/ontologies/ebucore/ebucore> .
@prefix rdam: <http://rdaregistry.info/Elements/m>
@prefix rdae: <http://rdaregistry.info/Elements/e>
@prefix schema: <http://schema.org/>
```

Resource9

```
a bf:MovingImage, bf:Work ;
bf:title "Gone with the Wind" ;
bf:copyrightDate "1939" ;
bf:hasInstance Resource 2 ;
bf:hasInstance Resource 3 ;
bf:hasInstance Resource 4 .
```

Resource10

```
a bf:Instance ;
bf:isInstanceOf Resource9 ;
bf:hasDerivative Resource11 ;
bf:originDate "1954" ;
bf:mediaCategory <http://id.loc.gov/vocabulary/mediaTypes/g> ; # projected
bf:carrierCategory <http://id.loc.gov/vocabulary/carriers/mr> ; # film reel
bf:format <http://metadataregistry.org/concept/show/id/2073.html> ; #film: 35mm print
bfe:typeOfResource <http://rdaregistry.info/termList/typeRec/1001> ; # analog; see note
[1]
bf:extent "5 film reels" ;
bfe:width "35 mm" ; # see note [2]
bfe:length "1600 ft" ; # see note [2], [3]
bfe:diameter "12.5 in" ; # see note [2]
rdam:baseMaterial <http://rdaregistry.info/termList/RDABaseMaterial/1029> ; # polyester;
see note [4]
rdam:generationOfMotionPictureFilm
<http://pbcore.org/vocabularies/instantiationGenerations#viewing-print> ; # viewing print;
see note [4]
rdam:polarity <http://rdaregistry.info/termList/RDAPolarity/1001> ; # positive; see
note [4]
rdam:recordingMedium <http://rdaregistry.info/termList/recMedium/1001> ; # magnetic; see
note [4]
rdam:trackConfiguration <http://rdaregistry.info/termList/trackConfig/1002>; # edge track;
see note [4]
ebucore:audioTrackConfiguration
<http://www.ebu.ch/metadata/ontologies/skos/ebu_AudioFormatCodeCS.rdf#_11> ; # movie
theatre; see note [4]
rdam:presentationFormat "widescreen" ; # see note [4]
ebucore:frameRate "24 fps" ; # see note [4]
```

bf:duration "238 min";
 bf:soundContent <http://rdaregistry.info/termList/soundCont/1001> ; # sound
 bf colorContent <http://pbcore.org/vocabularies/instantiationColors#color> ; # color
 ebucore:hasColourSpace "Technicolor" ; # see note [4], [5]
 bf:aspectRatio "1.375:1" ; # see note [5]
 ebucore:hasDataFormat
 <http://www.ebu.ch/metadata/ontologies/skos/ebu_TextUsageTypeCodeCS.rdf#_6> ; # subtitle;
 see note [4]
 bf:language <http://id.loc.gov/vocabulary/languages/spa> . # Spanish

Resource11

a bf:Instance ;
 bf:isInstanceOf Resource9 ;
 bf:isDerivativeOf Resource10 ;
 bf:originDate "2014-10-21" ;
 bf:mediaCategory <http://id.loc.gov/vocabulary/mediaTypes/v> ; # video
 bf:carrierCategory <http://id.loc.gov/vocabulary/carriers/cr> ; # online resource; see
 note [6]
 bf:format <http://www.digitalpreservation.gov/formats/fdd/fdd000178.shtml> ; # Digital
 Picture Exchange
 bf:extent "15,735 image files (DPX); 1 sound file (WAV)" ; # see note [8]
 rdam:generationOfDigitalResource <http://rdaregistry.info/termList/genDigital/1002> ; #
 master; see note [4]
 bfe:typeOfResource <http://rdaregistry.info/termList/typeRec/#1002> ; # digital; see note
 [1]
 ebucore:audioTrackConfiguration
 <http://www.ebu.ch/metadata/ontologies/skos/ebu_AudioFormatCodeCS.rdf#_12> ; # 7.1; see
 note [4]
 rdam:presentationFormat "widescreen" ; # see note [4]
 ebucore:frameRate "24 fps" ; # see note [4]
 ebucore:mimeType "image/x-dpx"; # see note [4]
 ebucore:fileSize "2 TB" ; # see note [4], [9]
 ebucore:width "4096"; # see note [4]
 ebucore:height "3112" ; # see note [4]
 ebucore:bitRate "300 Mbps" ; # see note [4]
 bf:duration "03:59:21" ;
 bf:soundContent <http://rdaregistry.info/termList/soundCont/1001> ; # sound
 bf colorContent <http://pbcore.org/vocabularies/instantiationColors#color> ; # color
 ebucore:hasColourSpace <http://cv.iptc.org/newscodes/colorspace#RGB> ; #RGB
 bf:aspectRatio "1.375:1" ; # see note [5]
 ebucore:bitDepth <http://pbcore.org/vocabularies/essenceTrackBitDepth#10> ; # 10; see
 note [4]
 ebucore:hasDataFormat
 <http://www.ebu.ch/metadata/ontologies/skos/ebu_TextUsageTypeCodeCS.rdf#_6> ; # subtitle;
 see note [4]
 ebucore:hasVideoEncodingFormat "logarithmic" ; # see note [4]
 ebucore:hasAudioEncodingFormat
 <http://www.ebu.ch/metadata/ontologies/skos/ebu_AudioCompressionCodeCS.rdf#_11> ; #
 Linear PCM; see note [4]
 bfe:chromaSubsampling
 <http://www.ebu.ch/metadata/ontologies/skos/ebu_VideoSamplingHierarchyCodeCS.rdf#_5> . #
 4:4:4; see note [10]

[1] We are proposing an extension of an attribute found in the content standards called Type
 of Recording. This attribute is used to distinguish between analog and digital sound
 recordings. In MARC it exists as field 344 subfield a as well as fixed field 007 position 13,
 when the resource is a sound recording. We feel that this distinction between analog and

digital resource can be made across all audiovisual resources and propose an extension of its applicability and the establishment of a new BIBFRAME property for Type of Resource, bf:typeOfResource.

[2] We are proposing that BF be extended to document specific dimensions rather than a single bf:dimensions property. This would include bf:width, bf:diameter, bf:length. These could be subproperties (rdfs:subPropertyOf) of bf:dimensions if users desire to be more specific.

[3] In this instance, we are describing the length per reel (1600 ft per reel). It is also possible that an organization might choose to describe the total length of all reels (8000 ft). Interpretation and utilization of dimensions for description would be the jurisdiction of a given content standard or internal preference/policy.

[4] Although we are using a property from RDA RDF here (e.g., rdam:baseMaterial), we feel that LC and the BIBFRAME community should decide whether to borrow properties from other vocabularies (as we have done here) or to extend BIBFRAME to support the expression of new attributes. In this case, an alternative approach would be to extend BIBFRAME to include property, e.g., bf:baseMaterial.

[6] We recognize a need for further developed vocabularies that can support the description of expected attributes (e.g., aspect ratio, and color space). Until such vocabularies are created, these properties will need to have literal ranges.

[7] Similar to note 6 above, for bf:carrierCategory, RDA's list of carrier types provides only one option for describing digital resources, i.e., online resource. We are using this option here, but we feel further development is needed to offer acceptable terms for describing the carrier property of digital resources. Not all digital resources are intended to be accessed "online." The term is assumptive and misleading. Preference would be to say that this resource is a "digital cinema file" or similar.

[8] No current content standards provide guidance for how to describe the extent of complex moving image resources such as DPX film scans. Although the aggregate of files represent this instance – what we might call a representation object in PREMIS, the reality is that the complex object is composed of many thousands of individual .DPX still image files. These files each represent a scan of one frame in a motion picture film. Special software reads the .DPX files in sequence to recreate the moving image of the film. Here we express the extent as 15,375 .DPX files, as well as 1 WAV file, which constitutes the film soundtrack. Alternatively, one could express extent as 1 DPX film object. Content standards and/or internal policy/preference will need to determine best practice here.

[9] The expression of file size here is a sum of the size of each .DPX file that makes up the set of .DPX files that represent this instance.

[10] Because none of the RDF siblings to BIBFRAME support the expression of the chroma subsampling attribute for digital image data compression, we are proposing that BF be extended to document this attribute with a new property, bf:chromaSubsampling.