

# RDA content elements

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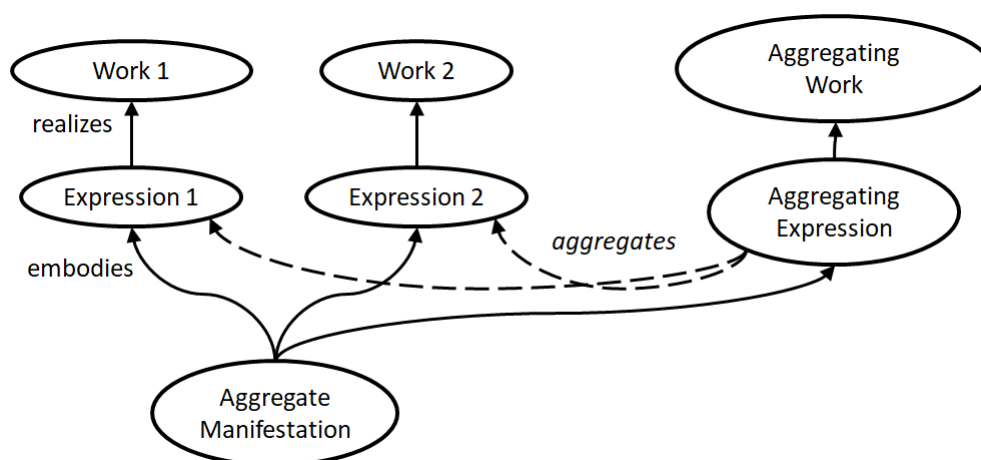
## Abstract

This paper makes recommendations for developing expression “content” elements to conform to the aggregates model. The paper does not address the need for additional elements to improve the recording of aggregating expressions and aggregating works.

## Background

### Aggregates model

This diagram shows the basic model for aggregates in the Library Reference Model:



An aggregate manifestation embodies two or more distinct expressions<sup>1</sup> and an aggregating expression that realizes the plan for aggregating the other expressions.

An aggregating expression is related to an expression that is aggregated by the shortcut relationship element **Expression: aggregates**. The full relationship is the chain from aggregating expression to aggregate manifestation to expression that is aggregated:

- Aggregating Expression [has] **manifestation of expression** Aggregate Manifestation
- Aggregate Manifestation [has] **expression manifested** Expression X

The shortcut avoids a description of the aggregate manifestation or a direct relationship between the aggregate manifestation and an expression that is aggregated. The latter usage reduces duplication if the same aggregating expression is embodied in multiple manifestations: the aggregate manifestation is described and related only to the aggregating expression.

The recording of separate entities for the expressions or works embodied by an aggregate manifestation is optional. An application can choose to record any or all of the aggregating expression and work, or any or all of the expressions that are aggregated and their works.

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<sup>1</sup> In some cases, there is only one expression that is aggregated. For example, the plan may be to aggregate an ‘annual top 5’ of expressions; if no expressions are published in a particular year, the aggregate is not published, if only one expression is published that year, the ‘aggregate’ is published.

## Contributor relationship elements

There are use cases for associating an agent who creates an expression or work with the aggregate manifestation, without recording the intermediary expression or work.

The original 'contributor' relationship designators have been recast as shortcut relationship elements in the beta Toolkit. A shortcut is a linked chain of two or more relationship elements that omits the intermediary entities.

For example, an aggregate manifestation can be directly associated with an agent who creates an expression that is aggregated using **Manifestation: contributor agent to aggregate**. This is a shortcut for:

1. Aggregate Manifestation [has] **expression manifested** Expression 1
2. Expression 1 [has] **creator agent of expression** Agent 1

Sub-types of this shortcut relationship element accommodate specific kinds of expression and work that are based on the RDA Content Type vocabulary encoding scheme. For example, **Manifestation: contributor agent of music** is restricted to intermediary expressions that have content type 'notated music', 'performed music', or 'tactile notated music'. Any of these indicates an expression of a 'musical work'. This ties references in the original Toolkit to 'musical work', 'moving image work', etc. to the RDA/ONIX Framework as a set of 'soft' categories for work that are defined in the Glossary but are not a formal vocabulary encoding scheme.

Recasting the original 'contributor' elements to conform to the aggregates model required changing the domain from Expression to Manifestation, as well as clarifying the definitions and amending the labels for consistency.

## Content elements

The following original Toolkit elements have not been recast to align them with the aggregates model:

- Expression: accessibility content
- Expression: colour content
  - Expression: details of colour content
  - Work: colour content of representative expression
- Expression: illustrative content
  - Expression: details of illustrative content
- Expression: sound content
  - Work: sound content of representative expression
- Expression: supplementary content

The current definitions of the elements are given in Appendix 1.

Most of the content elements have the context of an augmentation aggregate of two or more distinct expressions, with an assumption that one or more expressions are 'primary' and the rest are 'supplementary'. Some of the elements are also applicable to a collection aggregate, where all the expressions are more or less equal.

**Expression: content type** is a fundamental element for categorizing a distinct expression. The content elements can be aligned with all or some of the RDA Content Type terms, as shown in Table 1.

This provides the basis of two categories of content element:

- Elements that indicate a category of content (i.e. category of expression) that is not specifically based on content type:
  - accessibility content
  - supplementary content
- Elements that are restricted to a subset of content types:
  - colour content
  - illustrative content
  - sound content

The content elements are redundant in the context of describing an expression that is aggregated because the expression can be assigned a content type or category of expression that conveys the same information at a finer level of granularity.

The elements represent a range of semantics with respect to the RDA ontology.

“accessibility content” and “supplementary content” record values that may be taken from a vocabulary encoding scheme. The context is too wide to justify the development of RDA vocabulary encoding schemes for these elements.

“illustrative content” records values from a vocabulary encoding scheme, and RDA provides a VES. The data are only relevant to expressions with ‘image-like’ content types, including tactile images.

“colour content” records values from a vocabulary encoding scheme, and RDA provides a VES. The data are only relevant to expressions with ‘image’ and ‘text’ content types, excluding tactile images and text. “details of colour content” is used for unstructured descriptions and colour terms, and should be removed. A new element for ‘colour’ can record values from a vocabulary encoding scheme. The context is too wide to justify the development of an RDA vocabulary encoding scheme for this element.

The ‘sound content’ values of ‘sound’ and ‘silent’ correspond to a content type of performed music, sounds, or spoken word, or the absence of these content types, respectively. These values are a ‘dumbing-up’ or lossy indicators of the specific content types. An additional factor is that this element is currently the basis of a representative expression element, so there is some utility for a Work element for this characteristic. This element only has utility in the context of an aggregate, as a sound expression augmenting a primary expression.

The content elements have utility as shortcuts from an aggregating expression to an indication of the content type or category of an expression that is aggregated. The shortcut is more appropriate for an aggregating expression than an aggregate manifestation because the values are limited to expression characteristics.

### Aggregating expression

The RDA term ‘aggregating expression’ is defined as: An expression that is the realization of an aggregating work that selects and arranges expressions of one or more works, and embodies them in an aggregate.

The definition refers only the context of the aggregating work.

The RDA term ‘aggregating work’ is defined as: A work that is a plan to select and arrange one or more expressions of one or more works, and embody them in an aggregate.

The definition does not refer to an aggregating expression.

The definitions reflect the LRM's treatment of aggregating works and expressions. The LRM defines an aggregating expression in terms of the aggregating work. The LRM uses 'aggregating expression' and 'expression of an aggregating work' interchangeably. The only additional information about an aggregating expression is given in the scope note for LRM-R25 (was aggregated by/aggregated):

"Unlike the whole-part relationship between *expressions*, the *expressions* selected to appear together in the aggregate *manifestation* do not become components of the aggregating *expression*. Furthermore, the relationship between these *expressions* is not an inherent feature of the *works* that these *expressions* realize, and thus it does not hold in other *expressions* of those *works*."

***Proposition 1: An aggregating expression does not accumulate or inherit the characteristics of the expressions that are aggregated.***

An aggregating expression that 'aggregates' a set of expressions that are English texts does not itself have English as a language of expression or text as a content type.

***Proposition 2: No descriptive elements for an expression are applicable to an aggregating expression.***

An aggregating expression has no intrinsic characteristics that are worth recording.

A description of an aggregating expression must conform to the minimum description of an expression:

- At least one appellation element
- **Expression: work expressed** for the aggregating work
- **Expression: manifestation of expression** for the aggregate manifestation.

***Proposition 3: Only the relationship elements for a minimum description are applicable to an aggregating expression.***

All of the other elements useful for describing an aggregating expression are shortcuts, including **Expression: aggregates** and the shortcuts proposed in this paper.

This paper only addresses the existing content elements.

Separate proposals are required to identify other useful shortcuts, such as relating an aggregating expression to a language or content type of the aggregated expressions.

An aggregating work is realized by one and only one aggregating expression. This means that the aggregating expression is the only possible representative expression for an aggregating work.

A shortcut for an aggregating expression may be the basis of a representative expression element for an aggregating work. The value of a shortcut for an aggregating expression may be used as a component of an access point for work.

## supplementary content

***Recommendation 1: Redefine or deprecate Expression: supplementary content because it is not conformant with the model of aggregates.***

***Option 1: Redefine Expression: supplementary content as a shortcut.***

Shortcut:

1. **Expression: manifestation of expression** [for an aggregating expression]
2. **Manifestation: expression manifested** [for an expression that is aggregated]
3. **Expression: category of expression** [for a category of supplementary content taken from an unspecified vocabulary encoding scheme]

Definition: An indication of the kinds of expression that supplement the main expressions that are embodied by an augmentation aggregate.

Scope note: Supplementary content includes an index, a bibliography, an appendix, etc.

This has no impact on legacy values.

## accessibility content

***Recommendation 2: Redefine or deprecate Expression: accessibility content because it is not conformant with the model of aggregates.***

***Option 2: Redefine Expression: accessibility content as a shortcut***

Shortcut:

1. **Expression: manifestation of expression** [for an aggregating expression]
2. **Manifestation: expression manifested** [for an expression that is aggregated]
3. **Expression: category of expression** [for a category of accessibility content taken from an unspecified vocabulary encoding scheme]

Definition: An indication of the kinds of expression that provide alternative sensory modes to perceive the main expressions that are embodied by an augmentation aggregate.

Scope note: Accessibility content includes accessible labels, an audio description, captioning, image descriptions, sign language, and subtitles. Accessibility content does not include subtitles in a language different from the spoken content.

This is an element sub-type of **Expression: supplementary content**.

This has no impact on legacy values.

***Option 3: Add a shortcut element for Manifestation: accessibility content***

Shortcut:

1. **Manifestation: expression manifested** [for an expression that is aggregated]
2. **Expression: category of expression** [for a category of accessibility content taken from an unspecified vocabulary encoding scheme]

Definition and scope note are the same as Option 2.

This shortcut allows information about accessibility of content and carrier to be recorded for a manifestation.

## illustrative content

***Recommendation 3: Redefine or deprecate Expression: illustrative content and Expression: details of illustrative content because they are not conformant with the model of aggregates.***

**Option 4: Redefine Expression: illustrative content as a shortcut.**

Shortcut:

1. **Expression: manifestation of expression** [for an aggregating expression]
2. **Manifestation: expression manifested** [for an expression that is aggregated]
3. **Expression: category of expression** [for a category of illustrative content taken from the **RDA Illustrative Content** vocabulary encoding scheme]

Definition: An indication of the kinds of expression of image content that supplement the main expressions that are embodied by an augmentation aggregate.

Scope note: Illustrative content applies to an aggregate that embodies an expression with a content type of “cartographic image”, “cartographic moving image”, “cartographic tactile image”, “cartographic tactile three-dimensional form”, “cartographic three-dimensional form”, “three-dimensional moving image”, “two-dimensional moving image”, “tactile three-dimensional form”, “three-dimensional form”, “still image”, or “tactile image”. Tables containing only words or numerical data are excluded.

This is an element sub-type of **Expression: supplementary content**.

This has no impact on legacy values, which may include unstructured descriptions mapped from **Expression: details of illustrative content**, or taken from the RDA vocabulary encoding scheme or a local vocabulary encoding scheme.

## colour content

**Recommendation 4: Replace Expression: details of colour content with a new element for the specific colours found in the content of an expression.**

Add an element for **Expression: colour**

This element subsumes **Expression: details of colour content**. Details are recorded as an unstructured description.

A structured description, identifier or notation, or IRI are taken from a local vocabulary encoding scheme for colours. There are many controlled vocabularies for colour.

The element uses the default layout and instructions for VES elements that do not have an associated RDA vocabulary.

**Option 5: Add a scope note to Expression: colour content to restrict it to specific content types.**

Scope note: Colour content applies to an expression with a content type of “cartographic image”, “cartographic moving image”, “cartographic three-dimensional form”, “notated movement”, “notated music”, “performed movement”, “still image”, “text”, “three-dimensional moving image”, “three-dimensional form”, or “two-dimensional moving image”.

## sound content

**Recommendation 5: Redefine or deprecate Expression: sound content because it is not conformant with the model of aggregates.**

**Option 6: Redefine Expression: sound content as a shortcut.**

Shortcut:

1. **Expression: manifestation of expression** [for an aggregating expression]
2. **Manifestation: expression manifested** [for an expression that is aggregated]
3. **Expression: category of expression** [for a category of sound content taken from the **RDA Sound Content** vocabulary encoding scheme]

**Option 7: Add a scope note to Expression: sound content to restrict it to specific content types.**

Scope note: Sound content is present in an expression with a content type of “recorded music”, “sounds”, or “spoken word”.

## Further development

Investigate the need for additional elements to improve the recording of aggregating expressions and aggregating works. For example, should Expression: language of content, which is now subsumed into Expression: language of expression, be reinstated as a shortcut relationship for an aggregating expression?

## Recommendations and options

**Proposition 1: An aggregating expression does not accumulate or inherit the characteristics of the expressions that are aggregated.**

**Proposition 2: No descriptive elements for an expression are applicable to an aggregating expression.**

**Proposition 3: Only the relationship elements for a minimum description are applicable to an aggregating expression.**

**Recommendation 1: Redefine or deprecate Expression: supplementary content because it is not conformant with the model of aggregates.**

**Recommendation 2: Redefine or deprecate Expression: accessibility content because it is not conformant with the model of aggregates.**

**Recommendation 3: Redefine or deprecate Expression: illustrative content and Expression: details of illustrative content because they are not conformant with the model of aggregates.**

**Recommendation 4: Replace Expression: details of colour content with a new element for the specific colours found in the content of an expression.**

**Recommendation 5: Redefine or deprecate Expression: sound content because it is not conformant with the model of aggregates.**

**Option 1: Redefine Expression: supplementary content as a shortcut.**

**Option 2: Redefine Expression: accessibility content as a shortcut**

**Option 3: Add a shortcut element for Manifestation: accessibility content**

**Option 4: Redefine Expression: illustrative content as a shortcut.**

**Option 5: Add a scope note to Expression: colour content to restrict it to specific content types.**

***Option 6: Redefine Expression: sound content as a shortcut.***

***Option 7: Add a scope note to Expression: sound content to restrict it to specific content types.***



## Appendix 1: Definitions, etc. of current content elements.

### Expression: accessibility content

Definition: An indication of content that provides alternative sensory modes to perceive the primary content of an expression.

Scope note: Accessibility content includes accessible labels, audio description, captioning, image description, sign language, and subtitles. Accessibility content does not include subtitles in a language different from the spoken content.

### Expression: supplementary content

Definition: An indication of content that updates or complements the primary content of an expression.

Scope note: Supplementary content includes an index, a bibliography, an appendix, etc.

### Expression: colour content

Definition: A presence of colour, tone, etc., in the content of an expression.

Scope note: Black, white, single colour shades of black, single colour tints of white, and single colour tones of gray are considered to be single colours.

**RDA VES:** monochrome, polychrome

### Work: colour content of representative expression

Definition: A presence of colour, tone, etc., in the content of a representative expression of a work.

### Expression: details of colour content

Definition: Details of a presence of colour, tone, etc., in the content of an expression, and the specific colours, tones, etc., including black and white, present.

### Expression: illustrative content

Definition: A presence of **image content** that accompanies the primary content of an expression.

Scope note: Tables containing only words or numerical data are excluded.

**RDA VES:** coat of arms, etc.

### Expression: details of illustrative content

Definition: Details of content intended to illustrate the primary content of an expression.

### Expression: sound content

Definition: A presence or absence of sound in an expression.

**RDA VES:** silent, sound

### Work: sound content of representative expression

Definition: A presence or absence of sound in a representative expression of a work.

Table 1: Alignment of content elements with RDA Content Type terms.

<b>Content type</b>	<b>accessibility content</b>	<b>supplementary content</b>	<b>illustrative content</b>	<b>sound content</b>	<b>colour content</b>
cartographic dataset	Y	Y			
cartographic image	Y	Y	Y		Y
cartographic moving image	Y	Y	Y		Y
cartographic tactile image	Y	Y	Y		
cartographic tactile three-dimensional form	Y	Y	Y		
cartographic three-dimensional form	Y	Y	Y		Y
notated movement	Y	Y			Y
tactile notated movement	Y	Y			
performed movement	Y	Y			Y
computer dataset	Y	Y			
computer program	Y	Y			
three-dimensional moving image	Y	Y	Y		Y
two-dimensional moving image	Y	Y	Y		Y
notated music	Y	Y			Y
performed music	Y	Y		Y	
tactile notated music	Y	Y			
tactile three-dimensional form	Y	Y	Y		
three-dimensional form	Y	Y	Y		Y
still image	Y	Y	Y		Y
tactile image	Y	Y	Y		
tactile text	Y	Y			
text	Y	Y			Y
spoken word	Y	Y		Y	
sounds	Y	Y		Y	