

# BIBFRAME's Application Method for Reflecting LRM in Linked Data

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Library Reference Model (LRM) replacing FRBR is a new conceptual model for constructing linked data in library community. BIBFRAME as encoding format should be revised in order to reflect LRM. This research is to propose the BIBFRAME's application profile, practically mapping, to reflect representative expression attributes and manifestation statement of LRM's attributes

## LRM

IFLA Library Reference Model (LRM) replacing FR family is a new conceptual model for linked data. A representative expression attribute and a manifestation statement are newly developed as LRM properties.

- Representative expression attribute is an attribute which is deemed essential in characterizing the work and whose values are taken from a representative or canonical expression of the work as work property. For examples, musical works have key and medium of performance, and textual works have language and intended audience. These attributes' values are from the expressions of a work.
- Manifestation statement is a statement appearing in exemplars of the manifestation and deemed to be significant for users to understand how the resource represents itself. For example, the manifestation statement attribute may include transcribed elements such as: publication statement (as a whole), or alternatively, place of publication statement + publisher name statement + date of publication statement (as three individual statements) (Riva, Bœuf, & Žumer, 2017, 49).

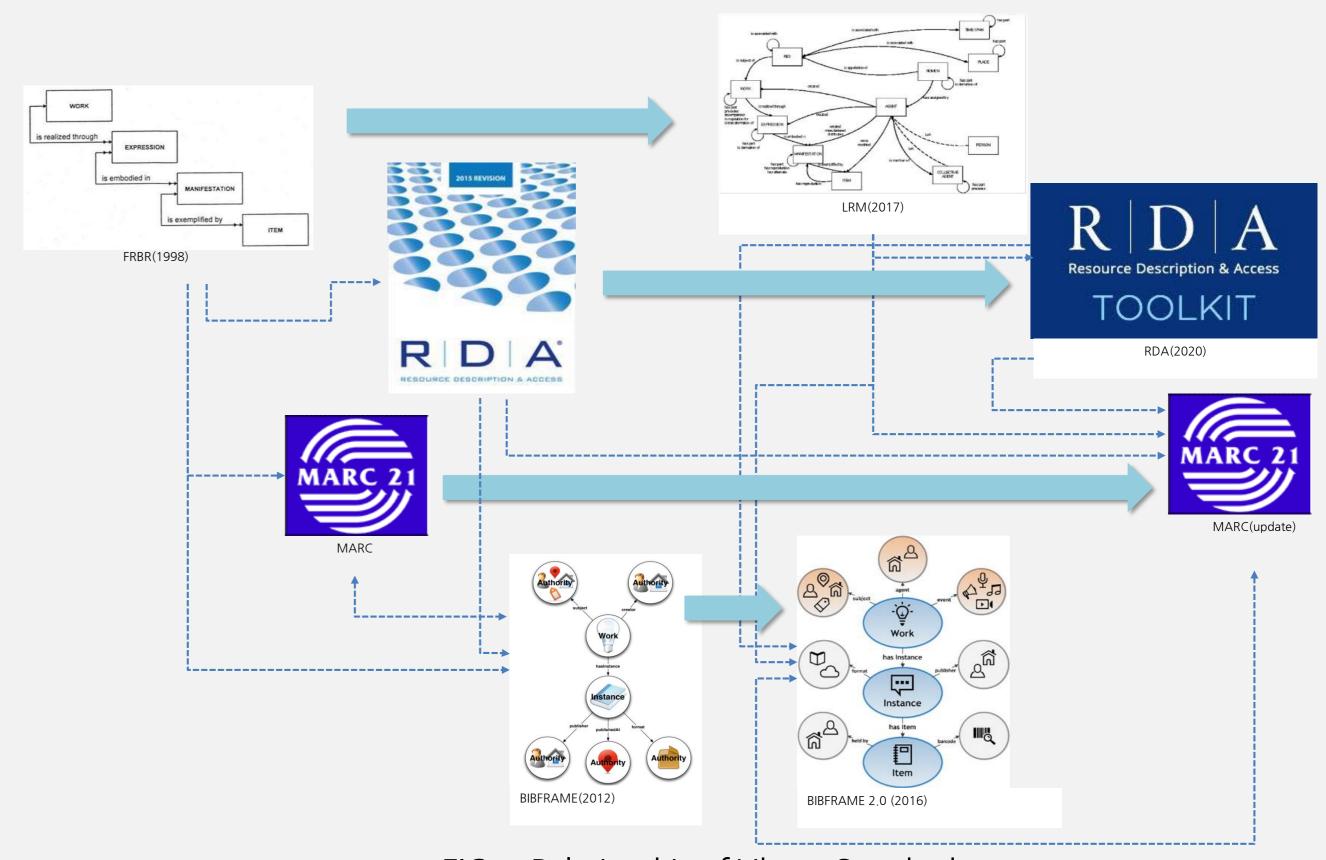


FIG. 1. Relationship of Library Standards

### **RDA 2020**

- Manifestation statements supports the user tasks *identify* and *find* to carry information that describes the manifestation itself and to follow the principle of representation. RDA 2020 developed attributes for it.
- A representative expression provides the values of specific elements used to identify a work and distinguish it from other works. RDA specifies which expression elements are considered significant for the description and distinction of works and provides a corresponding set of Work elements. Record the value of an element of a representative expression using any of the following elements as work properties (RDA, 2020).

#### MARC

MARC 21 has developed new tags for LRM according to MARC21 discussion paper. 881 tag is for manifestation statement, and 075, 381, 387 are considered for representative expression attributes but not yet decided. Following is 881 tag example for the manifestation statement that is based on Library of Congress(2021).

881 ##\$cTHE Opening of Heauen gates, Or The ready way to euer-lasting life. Deliuered in a most Familier Dia-logue, betweene Reason and Religion, touching Prædestination, Gods word, and Mans Free-will, to the vnderstan-ding of the vveakest Capacitie, and the confirming of the more strong. \$dThe second edition.\$cBy ARTHVR DENT, Preacher of the word of GOD, at South-shoobery in Essex.\$fImprinted at London for Iohn Wright,\$gand are to bee sold at his shop at Christ-Church gate.\$f1611.

## Mapping BIBFRAME to RDA

Representative expression and manifestation statement of LRM are mapping to BIBFRAME, but some RDA attributes couldn't be mapped to BIBFRAME such as following. Therefore, BIBFRAME should develop additional properties and classes to reflect entities, properties, and relations of LRM/RDA

LRM	RDA	BIBFRAME
Manifestat ion statement	manifestation copyright statement	   
	manifestation designation of sequence statement	<bf:part>,<bf:partnumber></bf:partnumber></bf:part>
	manifestation dissertation statement	   
	manifestation distribution statement	       Distribution>
	manifestation edition statement	   
	manifestation frequency statement	   
	manifestation identifier statement	   
	manifestation manufacture statement	     Hanufacture  
	manifestation production statement	     Production>
	manifestation publication statement	      Publication>
	manifestation regional encoding statement	→ not mapped to BF
	manifestation series statement	 bf:seriesStatement>
	manifestation title and responsibility statement	  bf:title> +  bf:responsibilityStatement>

LRM	RDA	BIBFRAME
Representa tive expression attribute	aspect ratio of representative expression	   
	colour content of representative expression	   colorContent>
	content type of representative expression	   
	date of capture of representative expression	 bf:date>
	date of representative expression	 bf:date>
	duration of representative expression	  duration>
	extent of representative expression	   
	intended audience of representative expression	   
	key of representative expression	   
	language of representative expression	 bf:language>
	medium of performance of choreographic content of representative expression	→ not mapped to BF
	medium of performance of musical content of representative expression	   
	place of capture of representative expression	   
	projection of cartographic content of representative expression	 bf:projection>
	scale of representative expression	 bf:scale>
	script of representative expression	→ not mapped to BF
	sound content of representative expression	 bf:soundContent>

## References

Library of Congress (2016). BIBFRAME Ontology. https://id.loc.gov/ontologies/bibframe.html

Library of Congress (2021). MARC Discussion Papers. https://www.loc.gov/marc/mac/list-dp.html#2021

RDA Toolkit (2020). https://access.rdatoolkit.org/

Riva, Pat, Patrick Le Bœuf, & Maja Žumer (2017). IFLA Library Reference Model. From https://repository.ifla.org/bitstream/123456789/40/1/ifla-lrm-august-2017\_rev201712.pdf